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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2018

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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. (Check one):

Large accelerated filer ☒ Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

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 ☒

At July 31, 2018, 53,213,737 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, 2018	December 31, 2017
Assets		
Cash and cash equivalents	$ 2,712,101	$ 2,923,075
Available-for-sale securities, at fair value (cost of $9,717,156 and $11,131,008, respectively)	9,593,366	11,120,664
Held-to-maturity securities, at cost (fair value of $15,493,995 and $12,548,280, respectively)	15,898,263	12,663,455
Non-marketable and other equity securities	852,505	651,053
Total investment securities	26,344,134	24,435,172
Loans, net of unearned income	25,996,192	23,106,316
Allowance for loan losses	(286,709)	(255,024)
Net loans	25,709,483	22,851,292
Premises and equipment, net of accumulated depreciation and amortization	117,603	128,682
Accrued interest receivable and other assets	984,424	876,246
Total assets	$ 55,867,745	$ 51,214,467
Liabilities and total equity		
Liabilities:		
Noninterest-bearing demand deposits	$ 40,593,302	$ 36,655,497
Interest-bearing deposits	8,293,993	7,598,578
Total deposits	48,887,295	44,254,075
Short-term borrowings	417,246	1,033,730
Other liabilities	1,062,391	911,755
Long-term debt	695,972	695,492
Total liabilities	51,062,904	46,895,052
Commitments and contingencies (Note 13 and Note 16)		
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; 53,210,627 shares and 52,835,188 shares outstanding, respectively	53	53
Additional paid-in capital	1,346,586	1,314,377
Retained earnings	3,397,879	2,866,837
Accumulated other comprehensive loss	(86,865)	(1,472)
Total SVBFG stockholders' equity	4,657,653	4,179,795
Noncontrolling interests	147,188	139,620
Total equity	4,804,841	4,319,415
Total liabilities and total equity	$ 55,867,745	$ 51,214,467

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

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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)	**2018**	**2017**	**2018**	**2017**
Interest income:				
Loans	$ 330,298	$ 250,197	$ 627,371	$ 477,538
Investment securities:				
Taxable	137,150	95,522	261,627	185,325
Non-taxable	7,666	885	12,758	1,531
Federal funds sold, securities purchased under agreements to resell and other short-term investment securities	6,187	7,323	11,943	10,459
Total interest income	481,301	353,927	913,699	674,853
Interest expense:				
Deposits	6,270	2,197	10,367	3,914
Borrowings	8,588	9,034	17,026	18,250
Total interest expense	14,858	11,231	27,393	22,164
Net interest income	466,443	342,696	886,306	652,689
Provision for credit losses	29,080	15,806	57,052	46,540
Net interest income after provision for credit losses	437,363	326,890	829,254	606,149
Noninterest income:				
Gains on investment securities, net	36,114	17,630	45,172	33,600
Gains on equity warrant assets, net	19,061	10,820	38,252	17,510
Foreign exchange fees	34,077	26,108	67,904	52,355
Credit card fees	22,926	18,099	44,618	35,829
Deposit service charges	18,794	14,563	36,493	28,538
Client investment fees	29,452	12,982	52,327	22,008
Lending related fees	9,528	8,509	20,263	17,470
Letters of credit and standby letters of credit fees	8,347	7,006	16,529	13,645
Other	14,390	12,811	26,649	25,232
Total noninterest income	192,689	128,528	348,207	246,187
Noninterest expense:				
Compensation and benefits	181,955	148,973	347,761	296,149
Professional services	46,813	27,925	75,538	53,344
Premises and equipment	19,173	18,958	37,718	34,816
Net occupancy	13,288	11,126	26,904	22,777
Business development and travel	12,095	11,389	23,286	20,584
FDIC and state assessments	10,326	9,313	19,756	17,995
Correspondent bank fees	3,277	3,163	6,687	6,608
Other	18,812	20,399	33,506	36,606
Total noninterest expense	305,739	251,246	571,156	488,879
Income before income tax expense	324,313	204,172	606,305	363,457
Income tax expense	77,287	71,656	151,253	123,061
Net income before noncontrolling interests	247,026	132,516	455,052	240,396
Net income attributable to noncontrolling interests	(9,228)	(9,323)	(22,293)	(15,720)
Net income available to common stockholders	$ 237,798	$ 123,193	$ 432,759	$ 224,676
Earnings per common share—basic	$ 4.48	$ 2.34	$ 8.17	$ 4.28
Earnings per common share—diluted	4.42	2.32	8.05	4.22

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, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
Net income before noncontrolling interests	$ 247,026	$ 132,516	$ 455,052	$ 240,396
Other comprehensive loss, net of tax:				
Change in foreign currency cumulative translation gains and losses:				
Foreign currency translation (losses) gains	(5,184)	1,578	(2,078)	2,535
Related tax benefit (expense)	1,433	(644)	577	(1,034)
Change in unrealized gains and losses on available-for-sale securities:				
Unrealized holding losses	(15,103)	(5,639)	(73,130)	(13,396)
Related tax benefit	4,349	2,500	20,275	5,636
Reclassification adjustment for losses (gains) included in net income (1)	—	123	—	(485)
Related tax (benefit) expense (1)	—	(50)	—	198
Reclassification of unrealized gains on equity securities to retained earnings for ASU 2016-01 (1)	—	—	(40,316)	—
Related tax expense (1)	—	—	11,145	—
Amortization of unrealized holding gains on securities transferred from available-for-sale to held-to-maturity	(932)	(1,566)	(2,138)	(3,337)
Related tax benefit	258	630	591	1,343
Reclassification of stranded tax effect to retained earnings for ASU 2018-02 (1)	—	—	(319)	—
Other comprehensive loss, net of tax	(15,179)	(3,068)	(85,393)	(8,540)
Comprehensive income	231,847	129,448	369,659	231,856
Comprehensive income attributable to noncontrolling interests	(9,228)	(9,323)	(22,293)	(15,720)
Comprehensive income attributable to SVBFG	$ 222,619	$ 120,125	$ 347,366	$ 216,136

(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 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, 2016	**52,254,074**	**$ 52**	**$ 1,242,741**	**$ 2,376,331**	**$ 23,430**	**$ 3,642,554**	**$ 134,483**	**$ 3,777,037**
Common stock issued under employee benefit plans, net of restricted stock cancellations	419,247	1	11,821	—	—	11,822	—	11,822
Common stock issued under ESOP	10,838	—	2,094	—	—	2,094	—	2,094
Net income	—	—	—	224,676	—	224,676	15,720	240,396
Capital calls and distributions, net	—	—	—	—	—	—	(9,603)	(9,603)
Net change in unrealized gains and losses on AFS securities, net of tax	—	—	—	—	(8,047)	(8,047)	—	(8,047)
Amortization of unrealized holding gains on securities transferred from AFS to HTM, net of tax	—	—	—	—	(1,994)	(1,994)	—	(1,994)
Foreign currency translation adjustments, net of tax	—	—	—	—	1,501	1,501	—	1,501
Share-based compensation, net	—	—	26,829	—	—	26,829	—	26,829
Balance at June 30, 2017	**52,684,159**	**$ 53**	**$ 1,283,485**	**$ 2,601,007**	**$ 14,890**	**$ 3,899,435**	**$ 140,600**	**$ 4,040,035**
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 ASU 2014-09, net of tax (1)	—	—	—	(5,802)	—	(5,802)	—	(5,802)
Cumulative adjustment for ASU 2016-01, net of tax (1)	—	—	—	103,766	(29,171)	74,595	—	74,595
Reclassification of stranded tax effect for ASU 2018-02 (1)	—	—	—	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**

(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).

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

(Dollars in thousands)	Six months ended June 30, 2018	2017
Cash flows from operating activities:		
Net income before noncontrolling interests	$ 455,052	$ 240,396
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	57,052	46,540
Changes in fair values of equity warrant assets, net of proceeds from exercises	(24,940)	(9,053)
Changes in fair values of derivatives, net	(8,768)	8,505
Gains on investment securities, net (1)	(45,172)	(20,341)
Distributions of earnings from non-marketable and other equity securities (1)	27,409	27,214
Depreciation and amortization	28,902	26,268
Amortization of premiums and discounts on investment securities, net	(478)	1,747
Amortization of share-based compensation	22,467	19,095
Amortization of deferred loan fees	(65,606)	(51,869)
Deferred income tax benefit	(18,594)	(9,827)
Excess tax benefit from exercise of stock options and vesting of restricted shares	(14,488)	(13,028)
Losses from the write-off of premises and equipment	7,006	—
Other gains	—	(3,858)
Changes in other assets and liabilities:		
Accrued interest receivable and payable, net	(28,213)	(8,852)
Accounts receivable and payable, net	(10,169)	(6,227)
Income tax receivable and payable, net	(21,076)	840
Accrued compensation	(55,814)	(51,636)
Foreign exchange spot contracts, net	68,870	159,607
Other, net	(26,060)	41,200
Net cash provided by operating activities	347,380	396,721
Cash flows from investing activities:		
Purchases of available-for-sale securities	(390,758)	(1,174,666)
Proceeds from sales of available-for-sale securities	—	5,024
Proceeds from maturities and paydowns of available-for-sale securities	1,775,568	1,715,291
Purchases of held-to-maturity securities	(4,067,389)	(2,298,290)
Proceeds from maturities and paydowns of held-to-maturity securities	935,820	806,386
Purchases of non-marketable and other securities	(28,099)	(9,488)
Proceeds from sales and distributions of capital of non-marketable and other securities (1)	75,139	23,765
Net increase in loans	(2,855,537)	(1,066,056)
Purchases of premises and equipment	(14,851)	(21,496)
Net cash used for investing activities	(4,570,107)	(2,019,530)
Cash flows from financing activities:		
Net increase in deposits	4,633,220	3,485,423
Net decrease in short-term borrowings	(616,484)	(512,198)
Principal payments of long-term debt	—	(46,235)
(Distributions to noncontrolling interests), net of contributions from noncontrolling interests	(14,725)	(9,603)
Proceeds from issuance of common stock, ESPP and ESOP	9,742	13,916
Net cash provided by financing activities	4,011,753	2,931,303
Net (decrease) increase in cash and cash equivalents	(210,974)	1,308,494
Cash and cash equivalents at beginning of period	2,923,075	2,545,750
Cash and cash equivalents at end of period	**$ 2,712,101**	**$ 3,854,244**
Supplemental disclosures:		
Cash paid during the period for:		
Interest	$ 27,730	$ 22,293
Income taxes	193,682	137,371
Noncash items during the period:		
Changes in unrealized gains and losses on available-for-sale securities, net of tax	$ (52,855)	$ (8,047)
Distributions of stock from investments	3,136	2,514

(1) During the first quarter of 2018 we adopted ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. This guidance was adopted on a retrospective basis and impacted the presentation between investing and operating activities related to distributions and net gains from our nonmarketable and other securities portfolio. See 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
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 variety 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 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, 2018 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, 2017 ("2017 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 2017 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 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) 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 May 2014, the FASB issued a new accounting standard update (ASU 2014-09, Revenue from Contracts with Customers (Topic 606)), which provides revenue recognition guidance that is intended to create greater consistency with respect to how and when revenue from contracts with customers is shown in the income statement. The guidance requires that revenue from contracts with customers be recognized when transfer of control over goods or services is passed to customers in the amount of consideration expected to be received. Subsequent Accounting Standard Updates have been issued clarifying the original pronouncement (ASU 2016-08, ASU 2016-10, ASU 2016-12 and ASU 2016-20).

On January 1, 2018, we adopted the new accounting standard ASU 2014-09, Revenue from Contracts with Customers and all the related amendments ("new revenue standard", "ASC 606" or "ASU 2014-09") using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. We elected to apply the practical expedient which allows us to expense costs related to obtaining contracts as incurred because the amortization period would have been one year or less. We recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

We completed a comprehensive scoping exercise to determine the revenue streams that are within the scope of this guidance. The scope of this guidance explicitly excludes net interest income, including interest income earned from our loan and fixed income securities portfolios, as well as certain other noninterest income earned from our lending-, investment- and derivative-related activities. Based on our completed assessment, we did not identify any material changes to the timing or the amounts of our revenue recognition, however, we identified a change in the timing of recognizing fund management fees in other noninterest income for a portion of our SVB Capital funds. Fund management fees for these certain SVB Capital funds will now be recognized at the time of distribution which typically occurs later in the life of the fund than had been previously recognized. The cumulative adjustment to retained earnings associated with this change was $5.8 million, net of tax, with an immaterial impact to our net income on an ongoing basis. The impact to net income as a result of applying the new revenue standard were decreases of $0.3 million and $0.9 million for the three and six months ended June 30, 2018, respectively.

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, 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, 2018 that were included in the corresponding contract liability balance at the beginning of the period were not material.

The cumulative effect of the changes to our consolidated balance sheets at January 1, 2018, for the adoption of the new revenue standard were as follows:

(Dollars in thousands)	Balance at December 31, 2017	Adjustments Due to Adoption of ASC 606	Balance at January 1, 2018
Accrued interest receivable and other assets:			
Accounts receivable	$ 55,946	$ (34,340)	$ 21,606
Other liabilities:			
Deferred revenue	27,057	(26,321)	736
Current taxes payable	4,675	(2,217)	2,458
Stockholders' Equity:			
Retained earnings	2,866,837	(5,802)	2,861,035

In accordance with the new revenue standard requirements, the disclosure of the impact of adoption on our consolidated balance sheets at June 30, 2018 and our statements of income for the three and six months ended June 30, 2018, were as follows:

	June 30, 2018		
(Dollars in thousands)	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Accrued interest receivable and other assets:			
Accounts receivable	$ 57,740	$ 97,584	$ (39,844)
Other liabilities:			
Deferred fees	479	29,964	(29,485)
Current taxes payable (receivable)	1,616	(924)	2,540
Stockholders' Equity:			
Retained earnings	3,397,879	3,403,357	(5,478)

	Three months ended June 30, 2018		
(Dollars in thousands)	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Other noninterest income:			
Fund management fees	$ 5,929	$ 6,308	$ (379)
Income tax expense	77,287	77,380	(93)
Net Income available to common stockholders	237,798	238,084	(286)
Diluted earnings per share	4.42	4.43	(0.01)

	Six months ended June 30, 2018		
(Dollars in thousands)	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Other noninterest income:			
Fund management fees	$ 11,665	$ 12,914	$ (1,249)
Income tax expense	151,253	151,577	(324)
Net Income available to common stockholders	432,759	433,684	(925)
Diluted earnings per share	8.05	8.07	(0.02)

In February 2018, the FASB issued a new accounting standard update (ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (ASU "2018-02")) to address certain stranded income tax effects in accumulated other comprehensive income ("AOCI") resulting from H.R.1, known as the Tax Cuts and Jobs Act (the "TCJ Act"). ASU 2018-02 changed current accounting whereby an entity may elect to reclassify the stranded tax effect from AOCI to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the TCJ Act (or portion thereof) is recorded. ASU 2018-02 is effective for periods beginning after December 15, 2018 and early adoption is permitted. We have elected to early adopt ASU 2018-02 and reclassified approximately $0.3 million from accumulated other comprehensive income to retained earnings within our consolidated statements of stockholders' equity in the first quarter of 2018.

On January 1, 2018, we adopted the new accounting standard update ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities (Topic 825), which addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. This guidance requires equity investments (except those accounted for under the equity method of accounting) to be measured at fair value with changes in fair value recognized in net income. We adopted this guidance using the modified retrospective method and our equity investments carried at cost with readily determinable fair values were re-measured at fair value and the difference between cost and fair value was recorded as a cumulative-effect adjustment to opening retained earnings as of January 1, 2018. The adjustment to opening retained earnings for these investments was $74.6 million, net of tax, with subsequent changes in the fair value of these equity securities recorded as unrealized gains or losses in our consolidated statements of income. Additionally, in accordance with this guidance, net unrealized gains of $29.2 million, net

of tax, included in accumulated other comprehensive income on January 1, 2018, related to our previously reported available-for-sale equity securities, were reclassified as an adjustment to retained earnings. Subsequent changes in the fair value of these equity securities were recorded as unrealized gains or losses in our consolidated statements of income. Furthermore, for purposes of disclosing the fair value of loans carried at amortized cost, our valuation methodology was updated to conform to an “exit price” concept as required by the standard update, resulting in an immaterial change in the fair value.

In August 2016, the FASB issued a new accounting standard update (ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments), which clarifies the guidance on eight specific cash flow issues. We adopted the new accounting standard, specifically as it relates to distributions from our equity method investments, on January 1, 2018. We elected to adopt the nature of distribution approach and applied the guidance retrospectively. The new guidance had an immaterial impact on the presentation between investing and operating activities within our statements of cash flows related to distributions and net gains from our nonmarketable and other securities portfolio.

In November 2016, the FASB issued a new accounting standard update (ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash), which requires that a statement of cash flows explains the change during the period in the total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning of period and end of period total amounts shown on the statement of cash flows. Previous to the update, there had been some diversity in practice. Given that we had already classified restricted cash such as cash reserves at the Federal Reserve as part of cash and cash equivalents on the cash flow statement, the update had no impact on how we were already reporting and presenting our statement of cash flows.

Recent Accounting Pronouncements

In February 2016, the FASB issued a new accounting standard update (ASU 2016-02, Leases (Topic 842)), which will require for all operating leases the recognition of a right-of-use asset and a corresponding lease liability, in the statement of financial position. 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. This guidance will be effective on January 1, 2019, with early adoption permitted. We plan to adopt the lease accounting guidance on January 1, 2019, on a prospective basis. We intend to elect a "package of expedients" which will result in continuing to account for existing leases for which the commencement date is before January 1, 2019, in accordance with Leases (Topic 840) throughout the lease term, including periods after adoption of the new guidance. We expect the adoption of this standard to have an impact of less than one percent of total assets and liabilities on our consolidated balance sheets reflective of the recognition of right-of-use assets and related lease liabilities associated predominantly with noncancelable operating leases. In addition, we do not expect the adoption of this guidance to have a material impact on our consolidated statements of income.

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), which amends the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses over the 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 currently have a project team in place and subject matter experts to assist with our review of key interpretive issues and the assessment of our existing credit loss forecasting models and processes against the new guidance to determine what modifications may be required. We are currently evaluating the impact this guidance will have on our financial position, results of operation and stockholders’ equity.

Reclassifications

Certain prior period amounts, primarily related to the adoption of new accounting guidance, have been reclassified to conform to current period presentations.

2. 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, 2018 and 2017:

		Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	**Income Statement Location**	**2018**	**2017**	**2018**	**2017**
Reclassification adjustment for losses (gains) included in net income (1)	Gains on investment securities, net	$ —	$ 123	$ —	$ (485)
Related tax (benefit) expense (1)	Income tax expense	—	(50)	—	198
Total reclassification adjustment for losses (gains) included in net income, net of tax (1)		$ —	$ 73	$ —	$ (287)

(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.

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 units 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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars and shares in thousands, except per share amounts)	2018	2017	2018	2017
Numerator:				
Net income available to common stockholders	$ 237,798	$ 123,193	$ 432,759	$ 224,676
Denominator:				
Weighted average common shares outstanding—basic	53,064	52,537	52,974	52,441
Weighted average effect of dilutive securities:				
Stock options and ESPP	400	368	408	397
Restricted stock units	312	289	350	342
Weighted average common shares outstanding—diluted	53,776	53,194	53,732	53,180
Earnings per common share:				
Basic	$ 4.48	$ 2.34	$ 8.17	$ 4.28
Diluted	4.42	2.32	8.05	4.22

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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Shares in thousands)	2018	2017	2018	2017
Stock options	58	73	33	36
Restricted stock units	113	—	59	—
Total	171	73	92	36

3. Share-Based Compensation

For the three and six months ended June 30, 2018 and 2017, we recorded share-based compensation and related tax benefits as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Share-based compensation expense	$ 11,944	$ 9,892	$ 22,467	$ 19,095
Income tax benefit related to share-based compensation expense	(2,743)	(3,349)	(5,060)	(6,364)

Unrecognized Compensation Expense

As of June 30, 2018, unrecognized share-based compensation expense was as follows:

(Dollars in thousands)	Unrecognized Expense	Weighted Average Expected Recognition Period - in Years
Stock options	$ 15,039	3.10
Restricted stock units	81,376	2.91
Total unrecognized share-based compensation expense	$ 96,415	

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, 2018:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life - in Years	Aggregate Intrinsic Value of In-The-Money Options
Outstanding at December 31, 2017	808,049	$ 105.68		
Granted	87,352	305.22		
Exercised	(156,580)	84.83		
Forfeited	(1,926)	130.69		
Expired	(2,337)	60.37		
Outstanding at June 30, 2018	734,558	133.93	3.92	$ 115,185,279
Vested and expected to vest at June 30, 2018	710,108	131.27	3.85	113,119,954
Exercisable at June 30, 2018	449,728	97.80	2.82	85,881,104

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 $288.76 as of June 30, 2018. The total intrinsic value of options exercised during the three and six months ended June 30, 2018 was $21.6 million and $31.0 million, respectively, compared to $5.6 million and $22.1 million for the comparable 2017 periods.

The table below provides information for restricted stock units under the 2006 Equity Incentive Plan for the six months ended June 30, 2018:

	Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2017	637,667	$ 135.86
Granted	185,292	301.56
Vested	(206,997)	130.29
Forfeited	(21,028)	148.43
Nonvested at June 30, 2018	594,934	188.96

4. 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 our investments in 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, 2018 and December 31, 2017:

(Dollars in thousands)	Consolidated VIEs	Unconsolidated VIEs	Maximum Exposure to Loss in Unconsolidated VIEs
June 30, 2018:			
Assets:			
Cash and cash equivalents	$ 4,113	$ —	$ —
Non-marketable and other equity securities (1)	208,275	529,429	529,429
Accrued interest receivable and other assets	397	—	—
Total assets	$ 212,785	$ 529,429	$ 529,429
Liabilities:			
Other liabilities (1)	765	161,113	—
Total liabilities	$ 765	$ 161,113	$ —
December 31, 2017:			
Assets:			
Cash and cash equivalents	$ 6,674	$ —	$ —
Non-marketable and other equity securities (1)	190,562	346,097	346,097
Accrued interest receivable and other assets	365	—	—
Total assets	$ 197,601	$ 346,097	$ 346,097
Liabilities:			
Other liabilities (1)	990	100,891	—
Total liabilities	$ 990	$ 100,891	$ —

(1) Included in our unconsolidated non-marketable and other equity securities portfolio at June 30, 2018 and December 31, 2017 are investments in qualified affordable housing projects of $251.5 million and $174.2 million, respectively, and related other liabilities consisting of unfunded credit commitments of $161.1 million and $100.9 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 investments in 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 13—"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 6—"Investment Securities" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

As of June 30, 2018, our exposure to loss with respect to the consolidated VIEs is limited to our net assets of $212.0 million and our exposure to loss for our unconsolidated VIEs is equal to our investment in these assets of $529.4 million.

5. Cash and Cash Equivalents

The following table details our cash and cash equivalents at June 30, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Cash and due from banks (1)	$ 2,670,473	$ 2,672,290
Securities purchased under agreements to resell (2)	37,379	247,876
Other short-term investment securities	4,249	2,909
Total cash and cash equivalents	$ 2,712,101	$ 2,923,075

(1) At June 30, 2018 and December 31, 2017, $645.8 million and $624.0 million, 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 $1.0 billion and $1.1 billion, respectively.

(2) At June 30, 2018 and December 31, 2017, securities purchased under agreements to resell were collateralized by U.S. Treasury securities and U.S. agency securities with aggregate fair values of $38.1 million and $252.8 million, respectively. None of these securities were sold or repledged as of June 30, 2018 and December 31, 2017.

6. 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 components of our available-for-sale investment securities portfolio at June 30, 2018 and December 31, 2017 are as follows:

	June 30, 2018			
(Dollars in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Carrying Value
Available-for-sale securities, at fair value:				
U.S. Treasury securities	$ 5,782,879	$ 4,186	$ (53,995)	$ 5,733,070
U.S. agency debentures	1,495,657	—	(9,793)	1,485,864
Residential mortgage-backed securities:				
Agency-issued collateralized mortgage obligations—fixed rate	2,103,572	39	(65,477)	2,038,134
Agency-issued collateralized mortgage obligations—variable rate	335,048	1,376	(126)	336,298
Total available-for-sale securities	$ 9,717,156	$ 5,601	$ (129,391)	$ 9,593,366

	December 31, 2017			
(Dollars in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Carrying Value
Available-for-sale securities, at fair value:				
U.S. Treasury securities	$ 6,865,068	$ 1,113	$ (25,679)	$ 6,840,502
U.S. agency debentures	1,569,195	3,569	(5,636)	1,567,128
Residential mortgage-backed securities:				
Agency-issued collateralized mortgage obligations—fixed rate	2,292,311	258	(25,534)	2,267,035
Agency-issued collateralized mortgage obligations—variable rate	372,481	1,375	(126)	373,730
Equity securities	31,953	40,525	(209)	72,269
Total available-for-sale securities	$ 11,131,008	$ 46,840	$ (57,184)	$ 11,120,664

The following table summarizes sale activity of available-for-sale securities during the three and six months ended June 30, 2018 and 2017 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)	2018	2017	2018	2017
Sales proceeds	$ —	$ 2,946	$ —	$ 5,024
Net realized gains and losses:				
Gross realized gains	—	418	—	1,093
Gross realized losses	—	(541)	—	(608)
Net realized (losses) gains	$ —	$ (123)	$ —	$ 485

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, 2018 and December 31, 2017:

	June 30, 2018					
	Less than 12 months		12 months or longer		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	$ 4,492,009	$ (48,430)	$ 845,938	$ (5,565)	$ 5,337,947	$ (53,995)
U.S. agency debentures	1,027,612	(3,984)	458,252	(5,809)	1,485,864	(9,793)
Residential mortgage-backed securities:						
Agency-issued collateralized mortgage obligations—fixed rate	1,857,591	(60,030)	166,002	(5,447)	2,023,593	(65,477)
Agency-issued collateralized mortgage obligations—variable rate	19,068	(9)	46,057	(117)	65,125	(126)
Total temporarily impaired securities (1)	$ 7,396,280	$ (112,453)	$ 1,516,249	$ (16,938)	$ 8,912,529	$ (129,391)

(1) As of June 30, 2018, we identified a total of 264 investments that were in unrealized loss positions, of which 64 investments totaling $1.5 billion with unrealized losses of $16.9 million have been in an impaired position for a period of time greater than 12 months. As of June 30, 2018, 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, 2018, 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, 2017					
	Less than 12 months		12 months or longer		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	$ 5,968,914	$ (23,397)	$ 323,966	$ (2,282)	$ 6,292,880	$ (25,679)
U.S. agency debentures	736,541	(2,289)	336,196	(3,347)	1,072,737	(5,636)
Residential mortgage-backed securities:						
Agency-issued collateralized mortgage obligations—fixed rate	2,193,277	(25,534)	—	—	2,193,277	(25,534)
Agency-issued collateralized mortgage obligations—variable rate	13,843	(3)	53,186	(123)	67,029	(126)
Equity securities	624	(209)	—	—	624	(209)
Total temporarily impaired securities (1)	$ 8,913,199	$ (51,432)	$ 713,348	$ (5,752)	$ 9,626,547	$ (57,184)

(1) As of December 31, 2017, we identified a total of 268 investments that were in unrealized loss positions, of which 46 investments totaling $713.3 million with unrealized losses of $5.8 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, 2018 by the remaining contractual principal maturities. For U.S. Treasury securities and U.S. agency debentures, 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, 2018				
(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	$ 5,733,070	$ 2,037,522	$ 3,349,925	$ 345,623	$ —
U.S. agency debentures	1,485,864	555,737	930,127	—	—
Residential mortgage-backed securities:					
Agency-issued collateralized mortgage obligations—fixed rate	2,038,134	—	—	47,098	1,991,036
Agency-issued collateralized mortgage obligations—variable rate	336,298	—	—	—	336,298
Total	$ 9,593,366	$ 2,593,259	$ 4,280,052	$ 392,721	$ 2,327,334

Held-to-Maturity Securities

The components of our held-to-maturity investment securities portfolio at June 30, 2018 and December 31, 2017 are as follows:

	June 30, 2018			
(Dollars in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Held-to-maturity securities, at cost:				
U.S. agency debentures (1)	$ 713,809	$ —	$ (13,818)	$ 699,991
Residential mortgage-backed securities:				
Agency-issued mortgage-backed securities	8,588,483	1,591	(210,148)	8,379,926
Agency-issued collateralized mortgage obligations—fixed rate	2,494,834	—	(91,919)	2,402,915
Agency-issued collateralized mortgage obligations—variable rate	233,285	691	(31)	233,945
Agency-issued commercial mortgage-backed securities	2,335,971	10	(62,982)	2,272,999
Municipal bonds and notes	1,531,881	1,280	(28,942)	1,504,219
Total held-to-maturity securities	$ 15,898,263	$ 3,572	$ (407,840)	$ 15,493,995

(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.

(Dollars in thousands)	December 31, 2017 Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Held-to-maturity securities, at cost:				
U.S. agency debentures (1)	$ 659,979	$ 3,167	$ (1,601)	$ 661,545
Residential mortgage-backed securities:				
Agency-issued mortgage-backed securities	6,304,969	4,854	(43,528)	6,266,295
Agency-issued collateralized mortgage obligations—fixed rate	2,829,979	23	(54,372)	2,775,630
Agency-issued collateralized mortgage obligations—variable rate	255,782	733	(34)	256,481
Agency-issued commercial mortgage-backed securities	1,868,985	694	(25,563)	1,844,116
Municipal bonds and notes	743,761	3,452	(3,000)	744,213
Total held-to-maturity securities	$ 12,663,455	$ 12,923	$ (128,098)	$ 12,548,280

(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, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018 Less than 12 months Fair Value of Investments	Less than 12 months Unrealized Losses	12 months or longer Fair Value of Investments	12 months or longer Unrealized Losses	Total Fair Value of Investments	Total Unrealized Losses
Held-to-maturity securities:						
U.S. agency debentures	$ 645,990	$ (10,883)	$ 54,001	$ (2,935)	$ 699,991	$ (13,818)
Residential mortgage-backed securities:						
Agency-issued mortgage-backed securities	7,436,980	(192,418)	364,687	(17,730)	7,801,667	(210,148)
Agency-issued collateralized mortgage obligations—fixed rate	776,389	(24,833)	1,626,527	(67,086)	2,402,916	(91,919)
Agency-issued collateralized mortgage obligations—variable rate	3,687	(1)	8,889	(30)	12,576	(31)
Agency-issued commercial mortgage-backed securities	1,460,340	(38,747)	715,596	(24,235)	2,175,936	(62,982)
Municipal bonds and notes	1,046,102	(28,359)	15,859	(583)	1,061,961	(28,942)
Total temporarily impaired securities (1)	$ 11,369,488	$ (295,241)	$ 2,785,559	$ (112,599)	$ 14,155,047	$ (407,840)

(1) As of June 30, 2018, we identified a total of 1,236 investments that were in unrealized loss positions, of which 226 investments totaling $2.8 billion with unrealized losses of $112.6 million have been in an impaired position for a period of time greater than 12 months. As of June 30, 2018, 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, 2018, 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.

(Dollars in thousands)	December 31, 2017					
	Less than 12 months		12 months or longer		Total	
	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	$ 104,688	$ (1,601)	$ —	$ —	$ 104,688	$ (1,601)
Residential mortgage-backed securities:						
Agency-issued mortgage-backed securities	4,270,377	(34,092)	408,913	(9,436)	4,679,290	(43,528)
Agency-issued collateralized mortgage obligations—fixed rate	1,011,709	(13,631)	1,741,614	(40,741)	2,753,323	(54,372)
Agency-issued collateralized mortgage obligations—variable rate	—	—	9,812	(34)	9,812	(34)
Agency-issued commercial mortgage-backed securities	979,361	(11,566)	773,712	(13,997)	1,753,073	(25,563)
Municipal bonds and notes	344,796	(2,103)	32,844	(897)	377,640	(3,000)
Total temporarily impaired securities (1)	$ 6,710,931	$ (62,993)	$ 2,966,895	$ (65,105)	$ 9,677,826	$ (128,098)

(1) As of December 31, 2017, we identified a total of 753 investments that were in unrealized loss positions, of which 237 investments totaling $3.0 billion with unrealized losses of $65.1 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, 2018. For U.S. agency debentures, 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 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, 2018									
	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	$ 713,809	$ 699,991	$ —	$ —	$ 122,040	$ 120,081	$ 591,769	$ 579,910	$ —	$ —
Residential mortgage-backed securities:										
Agency-issued mortgage-backed securities	8,588,483	8,379,926	707	706	172,594	168,271	672,564	648,623	7,742,618	7,562,326
Agency-issued collateralized mortgage obligations—fixed rate	2,494,834	2,402,915	—	—	—	—	412,530	394,779	2,082,304	2,008,136
Agency-issued collateralized mortgage obligations—variable rate	233,285	233,945	—	—	—	—	—	—	233,285	233,945
Agency-issued commercial mortgage-backed securities	2,335,971	2,272,999	—	—	—	—	—	—	2,335,971	2,272,999
Municipal bonds and notes	1,531,881	1,504,219	7,257	7,236	75,946	74,989	259,085	250,034	1,189,593	1,171,960
Total	$15,898,263	$15,493,995	$ 7,964	$ 7,942	$ 370,580	$ 363,341	$1,935,948	$1,873,346	$13,583,771	$13,249,366

Non-marketable and Other Equity Securities

The components of our non-marketable and other equity securities portfolio at June 30, 2018 and December 31, 2017 are as follows:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Non-marketable and other equity securities:		
Non-marketable securities (fair value accounting):		
Consolidated venture capital and private equity fund investments (1)	$ 133,007	$ 128,111
Unconsolidated venture capital and private equity fund investments (2)	211,113	98,548
Other investments without a readily determinable fair value (3)	24,015	27,680
Other equity securities in public companies (fair value accounting) (4)	4,412	310
Non-marketable securities (equity method accounting) (5):		
Venture capital and private equity fund investments	102,838	89,809
Debt funds	14,215	21,183
Other investments	111,426	111,198
Investments in qualified affordable housing projects, net (6)	251,479	174,214
Total non-marketable and other equity securities	$ 852,505	$ 651,053

(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, 2018 and December 31, 2017 (fair value accounting):

	June 30, 2018		December 31, 2017	
(Dollars in thousands)	Amount	Ownership %	Amount	Ownership %
Strategic Investors Fund, LP	$ 13,972	12.6%	$ 14,673	12.6%
Capital Preferred Return Fund, LP	58,148	20.0	54,147	20.0
Growth Partners, LP	59,886	33.0	58,372	33.0
CP I, LP	1,001	10.7	919	10.7
Total consolidated venture capital and private equity fund investments	$ 133,007		$ 128,111	

(2) The carrying value represents investments in 226 and 235 funds (primarily venture capital funds) at June 30, 2018 and December 31, 2017, 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. Effective January 1, 2018 we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which eliminated the concept of cost method accounting. On a prospective basis we will 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. We recorded a cumulative adjustment to opening retained earnings on January 1, 2018 for the difference between fair value and cost for these fund investments. The estimated fair value and carrying value of these venture capital and private equity fund investments was $211.1 million as of June 30, 2018. As of December 31, 2017, these investments were carried at cost and had a carrying value of $98.5 million.

(3) Effective January 1, 2018, we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which eliminated the concept of cost method accounting. On a prospective basis we will report our other investments in the line item "Other investments without a readily determinable fair value". 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, 2018:

(Dollars in thousands)	Six months ended June 30, 2018
Carrying value as of January 1, 2018	$ 27,680
Upward carrying value adjustments	3,630
Downward carrying value adjustments	(1,611)
Additions	3,654
Sales and dispositions	(9,338)
Carrying value as of June 30, 2018	$ 24,015

(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. Effective January 1, 2018 we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which requires equity securities to be measured at fair value with changes in the fair value recognized through net income. Prior to January 1, 2018 we reported equity securities in public companies that we held as a result of exercising public equity warrant assets in available-for-sale securities. On a prospective basis, these equity securities will be reported in non-marketable and other equity securities.

(5) The following table shows the carrying value and our ownership percentage of each investment at June 30, 2018 and December 31, 2017 (equity method accounting):

	June 30, 2018		December 31, 2017	
(Dollars in thousands)	Amount	Ownership %	Amount	Ownership %
Venture capital and private equity fund investments:				
Strategic Investors Fund II, LP	$ 5,003	8.6%	$ 6,342	8.6%
Strategic Investors Fund III, LP	18,858	5.9	18,758	5.9
Strategic Investors Fund IV, LP	29,152	5.0	25,551	5.0
Strategic Investors Fund V funds	21,247	Various	16,856	Various
CP II, LP (i)	6,792	5.1	6,700	5.1
Other venture capital and private equity fund investments	21,786	Various	15,602	Various
Total venture capital and private equity fund investments	$ 102,838		$ 89,809	
Debt funds:				
Gold Hill Capital 2008, LP (ii)	$ 11,153	15.5%	$ 18,690	15.5%
Other debt funds	3,062	Various	2,493	Various
Total debt funds	$ 14,215		$ 21,183	
Other investments:				
SPD Silicon Valley Bank Co., Ltd.	$ 75,837	50.0%	$ 75,337	50.0%
Other investments	35,589	Various	35,861	Various
Total other investments	$ 111,426		$ 111,198	

(i) Our ownership includes direct ownership 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, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Investments in qualified affordable housing projects, net	$ 251,479	$ 174,214
Other liabilities	161,113	100,891

The following table presents other information relating to our investments in qualified affordable housing projects for the three and six months ended June 30, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Tax credits and other tax benefits recognized	$ 5,207	$ 3,968	$ 10,629	$ 8,660
Amortization expense included in provision for income taxes (i)	4,705	3,385	9,497	6,621

(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 on non-marketable and other equity securities for the three and six months ended June 30, 2018 and 2017 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)	2018	2017	2018	2017
Net gains on non-marketable and other equity securities:				
Non-marketable securities (fair value accounting):				
Consolidated venture capital and private equity fund investments	$ 4,397	$ 9,713	$ 16,044	$ 16,176
Unconsolidated venture capital and private equity fund investments (1)	19,136	6,184	30,855	9,231
Other investments without a readily determinable fair value (1)	60	30	1,801	3,403
Other equity securities in public companies (fair value accounting) (1)	88	(25)	(22,194)	(107)
Non-marketable securities (equity method accounting):				
Venture capital and private equity fund investments	9,212	2,657	18,781	6,391
Debt funds	726	682	(1,573)	251
Other investments	2,495	(1,488)	1,458	(2,230)
Total net gains on non-marketable and other equity securities	$ 36,114	$ 17,753	$ 45,172	$ 33,115
Less: Net gains (losses) on non-marketable and other equity securities sold	1,915	31	(21,163)	3,404
Unrealized net gains on non-marketable and other equity securities still held	$ 34,199	$ 17,722	$ 66,335	$ 29,711

(1) Prior period amounts are not determined in a manner consistent with the current period presentation due to the adoption of accounting standard update (ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities (Topic 825)).

7. 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 $165 million and $148 million at June 30, 2018 and December 31, 2017, respectively, is presented in the following table:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Commercial loans:		
Software/internet	$ 6,230,358	$ 6,172,531
Hardware	1,269,241	1,193,599
Private equity/venture capital	12,224,155	9,952,377
Life science/healthcare	2,087,872	1,808,827
Premium wine	198,813	204,105
Other	316,392	365,724
Total commercial loans	22,326,831	19,697,163
Real estate secured loans:		
Premium wine (1)	685,357	669,053
Consumer loans (2)	2,481,062	2,300,506
Other	41,275	42,068
Total real estate secured loans	3,207,694	3,011,627
Construction loans	64,388	68,546
Consumer loans	397,279	328,980
Total loans, net of unearned income (3)	$ 25,996,192	$ 23,106,316

(1) Included in our premium wine portfolio are gross construction loans of $104 million and $100 million at June 30, 2018 and December 31, 2017, respectively.
(2) Consumer loans secured by real estate at June 30, 2018 and December 31, 2017 were comprised of the following:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Loans for personal residence	$ 2,144,326	$ 1,995,840
Loans to eligible employees	266,988	243,118
Home equity lines of credit	69,748	61,548
Consumer loans secured by real estate	$ 2,481,062	$ 2,300,506

(3) Included within our total loan portfolio are credit card loans of $315 million and $270 million at June 30, 2018 and December 31, 2017, respectively.

Credit Quality

The composition of loans, net of unearned income of $165 million and $148 million at June 30, 2018 and December 31, 2017, respectively, broken out by portfolio segment and class of financing receivable, is as follows:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Commercial loans:		
Software/internet	$ 6,230,358	$ 6,172,531
Hardware	1,269,241	1,193,599
Private equity/venture capital	12,224,155	9,952,377
Life science/healthcare	2,087,872	1,808,827
Premium wine	884,170	873,158
Other	422,055	476,338
Total commercial loans	23,117,851	20,476,830
Consumer loans:		
Real estate secured loans	2,481,062	2,300,506
Other consumer loans	397,279	328,980
Total consumer loans	2,878,341	2,629,486
Total loans, net of unearned income	$ 25,996,192	$ 23,106,316

The following table summarizes the aging of our gross loans, broken out by portfolio segment and class of financing receivable as of June 30, 2018 and December 31, 2017:

(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, 2018:						
Commercial loans:						
Software/internet	$ 7,996	$ 6,271	$ 459	$ 14,726	$ 6,174,542	$ 459
Hardware	645	40	3	688	1,238,451	3
Private equity/venture capital	62,536	10	—	62,546	12,170,459	—
Life science/healthcare	671	269	—	940	2,130,976	—
Premium wine	3,350	—	—	3,350	879,176	—
Other	1	3	—	4	436,011	—
Total commercial loans	75,199	6,593	462	82,254	23,029,615	462
Consumer loans:						
Real estate secured loans	—	—	—	—	2,473,458	—
Other consumer loans	1,489	—	—	1,489	395,787	—
Total consumer loans	1,489	—	—	1,489	2,869,245	—
Total gross loans excluding impaired loans	76,688	6,593	462	83,743	25,898,860	462
Impaired loans	1,557	2,070	36,196	39,823	138,356	—
Total gross loans	$ 78,245	$ 8,663	$ 36,658	$ 123,566	$ 26,037,216	$ 462
December 31, 2017:						
Commercial loans:						
Software/internet	$ 14,257	$ 6,526	$ 141	$ 20,924	$ 6,101,147	$ 141
Hardware	1,145	77	50	1,272	1,163,278	50
Private equity/venture capital	86,566	38,580	—	125,146	9,835,317	—
Life science/healthcare	4,390	191	—	4,581	1,841,692	—
Premium wine	418	—	—	418	871,074	—
Other	445	—	—	445	490,292	—
Total commercial loans	107,221	45,374	191	152,786	20,302,800	191
Consumer loans:						
Real estate secured loans	2,164	532	—	2,696	2,292,980	—
Other consumer loans	796	—	—	796	327,234	—
Total consumer loans	2,960	532	—	3,492	2,620,214	—
Total gross loans excluding impaired loans	110,181	45,906	191	156,278	22,923,014	191
Impaired loans	1,344	11,902	30,403	43,649	131,212	—
Total gross loans	$ 111,525	$ 57,808	$ 30,594	$ 199,927	$ 23,054,226	$ 191

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, 2018 and December 31, 2017:

(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, 2018:				
Commercial loans:				
Software/internet	$ 58,136	$ 44,384	$ 102,520	$ 126,752
Hardware	17,093	25,201	42,294	43,403
Private equity/venture capital	—	—	—	—
Life science/healthcare	26,170	250	26,420	31,517
Premium wine	331	2,193	2,524	2,576
Other	8	—	8	36
Total commercial loans	101,738	72,028	173,766	204,284
Consumer loans:				
Real estate secured loans	3,254	1,159	4,413	6,012
Other consumer loans	—	—	—	—
Total consumer loans	3,254	1,159	4,413	6,012
Total	$ 104,992	$ 73,187	$ 178,179	$ 210,296
December 31, 2017:				
Commercial loans:				
Software/internet	$ 49,645	$ 61,009	$ 110,654	$ 129,006
Hardware	15,637	20,713	36,350	41,721
Private equity/venture capital	658	—	658	984
Life science/healthcare	20,521	1,166	21,687	26,360
Premium wine	—	2,877	2,877	2,911
Other	32	—	32	165
Total commercial loans	86,493	85,765	172,258	201,147
Consumer loans:				
Real estate secured loans	1,331	850	2,181	3,712
Other consumer loans	422	—	422	436
Total consumer loans	1,753	850	2,603	4,148
Total	$ 88,246	$ 86,615	$ 174,861	$ 205,295

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, 2018 and 2017:

Three months ended June 30,	Average impaired loans		Interest income recognized on impaired loans	
(Dollars in thousands)	2018	2017	2018	2017
Commercial loans:				
Software/internet	$ 110,101	$ 136,374	$ 315	$ 711
Hardware	37,058	29,771	237	510
Private equity/venture capital	72	327	—	3
Life science/healthcare	21,790	36,033	5	191
Premium wine	2,604	3,221	36	38
Other	379	708	—	—
Total commercial loans	172,004	206,434	593	1,453
Consumer loans:				
Real estate secured loans	4,466	1,360	3	—
Other consumer loans	693	1,679	—	—
Total consumer loans	5,159	3,039	3	—
Total average impaired loans	$ 177,163	$ 209,473	$ 596	$ 1,453

Six months ended June 30,	Average impaired loans		Interest income recognized on impaired loans	
(Dollars in thousands)	2018	2017	2018	2017
Commercial loans:				
Software/internet	$ 109,444	$ 123,145	$ 562	$ 938
Hardware	37,742	31,940	289	943
Private equity/venture capital	187	342	—	5
Life science/healthcare	22,234	37,488	11	291
Premium wine	2,686	3,217	72	76
Other	195	885	—	—
Total commercial loans	172,488	197,017	934	2,253
Consumer loans:				
Real estate secured loans	3,765	1,424	8	—
Other consumer loans	716	1,914	—	—
Total consumer loans	4,481	3,338	8	—
Total average impaired loans	$ 176,969	$ 200,355	$ 942	$ 2,253

The following tables summarize the activity relating to our allowance for loan losses for the three and six months ended June 30, 2018 and 2017, broken out by portfolio segment:

Three months ended June 30, 2018 (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

Three months ended June 30, 2017 (Dollars in thousands)	Beginning Balance March 31, 2017	Charge-offs	Recoveries	Provision for (Reduction of) Loan Losses	Foreign Currency Translation Adjustments	Ending Balance June 30, 2017
Commercial loans:						
Software/internet	$ 109,502	$ (19,401)	$ 1,236	$ 1,527	$ 73	$ 92,937
Hardware	23,284	(249)	77	4,474	214	27,800
Private equity/venture capital	57,078	—	—	9,263	444	66,785
Life science/healthcare	31,542	(4,678)	8	819	39	27,730
Premium wine	4,343	—	—	(1,155)	(55)	3,133
Other	4,377	(753)	180	316	15	4,135
Total commercial loans	230,126	(25,081)	1,501	15,244	730	222,520
Total consumer loans	13,004	—	1,034	(59)	(3)	13,976
Total allowance for loan losses	$ 243,130	$ (25,081)	$ 2,535	$ 15,185	$ 727	$ 236,496

Six months ended June 30, 2018 (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

Six months ended June 30, 2017 (Dollars in thousands)	Beginning Balance December 31, 2016	Charge-offs	Recoveries	Provision for (Reduction of) Loan Losses	Foreign Currency Translation Adjustments	Ending Balance June 30, 2017
Commercial loans:						
Software/internet	$ 97,388	$ (27,381)	$ 2,407	$ 20,246	$ 277	$ 92,937
Hardware	31,166	(4,273)	344	394	169	27,800
Private equity/venture capital	50,299	—	—	15,969	517	66,785
Life science/healthcare	25,446	(6,410)	44	8,527	123	27,730
Premium wine	4,115	—	—	(929)	(53)	3,133
Other	4,768	(1,047)	477	(74)	11	4,135
Total commercial loans	213,182	(39,111)	3,272	44,133	1,044	222,520
Total consumer loans	12,184	—	1,055	731	6	13,976
Total allowance for loan losses	$ 225,366	$ (39,111)	$ 4,327	$ 44,864	$ 1,050	$ 236,496

The following table summarizes the activity relating to our allowance for unfunded credit commitments for the three and six months ended June 30, 2018 and 2017:

(Dollars in thousands)	Three months ended June 30, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
Beginning balance	$ 52,823	$ 46,335	$ 51,770	$ 45,265
Provision for unfunded credit commitments	1,424	621	2,400	1,676
Foreign currency translation adjustments	(143)	44	(66)	59
Ending balance (1)	$ 54,104	$ 47,000	$ 54,104	$ 47,000

(1) See Note 13—"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, 2018 and December 31, 2017, broken out by portfolio segment:

	June 30, 2018				December 31, 2017			
	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	$ 25,320	$ 102,520	$ 77,328	$ 6,127,838	$ 23,088	$ 110,654	$ 73,016	$ 6,061,877
Hardware	13,392	42,294	21,303	1,226,947	8,450	36,350	19,164	1,157,249
Private equity/venture capital	—	—	89,409	12,224,155	330	658	82,138	9,951,719
Life science/healthcare	14,442	26,420	20,622	2,061,452	9,315	21,687	15,609	1,787,140
Premium wine	—	2,524	3,438	881,646	—	2,877	3,532	870,281
Other	8	8	2,888	422,047	32	32	3,909	476,306
Total commercial loans	53,162	173,766	214,988	22,944,085	41,215	172,258	197,368	20,304,572
Total consumer loans	515	4,413	18,044	2,873,928	578	2,603	15,863	2,626,883
Total	$ 53,677	$ 178,179	$ 233,032	$ 25,818,013	$ 41,793	$ 174,861	$ 213,231	$ 22,931,455

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 2017 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, 2018 and December 31, 2017:

(Dollars in thousands)	Pass	Performing (Criticized)	Performing Impaired (Criticized)	Nonperforming Impaired (Nonaccrual)	Total
June 30, 2018:					
Commercial loans:					
Software/internet	$ 5,645,661	$ 543,607	$ 25,369	$ 77,151	$ 6,291,788
Hardware	1,163,629	75,510	25,201	17,093	1,281,433
Private equity/venture capital	12,229,454	3,551	—	—	12,233,005
Life science/healthcare	1,909,151	222,765	250	26,170	2,158,336
Premium wine	840,649	41,877	2,193	331	885,050
Other	432,652	3,363	—	8	436,023
Total commercial loans	22,221,196	890,673	53,013	120,753	23,285,635
Consumer loans:					
Real estate secured loans	2,462,007	11,451	324	4,089	2,477,871
Other consumer loans	396,902	374	—	—	397,276
Total consumer loans	2,858,909	11,825	324	4,089	2,875,147
Total gross loans	$ 25,080,105	$ 902,498	$ 53,337	$ 124,842	$ 26,160,782
December 31, 2017:					
Commercial loans:					
Software/internet	$ 5,655,739	$ 466,332	$ 31,794	$ 78,860	$ 6,232,725
Hardware	1,112,574	51,976	20,165	16,185	1,200,900
Private equity/venture capital	9,955,082	5,381	—	658	9,961,121
Life science/healthcare	1,720,613	125,660	1,167	20,520	1,867,960
Premium wine	834,537	36,955	2,476	401	874,369
Other	469,721	21,016	—	32	490,769
Total commercial loans	19,748,266	707,320	55,602	116,656	20,627,844
Consumer loans:					
Real estate secured loans	2,282,375	13,301	—	2,181	2,297,857
Other consumer loans	326,851	1,179	—	422	328,452
Total consumer loans	2,609,226	14,480	—	2,603	2,626,309
Total gross loans	$ 22,357,492	$ 721,800	$ 55,602	$ 119,259	$ 23,254,153

Troubled Debt Restructurings

As of June 30, 2018 we had 20 TDRs with a total carrying value of $128.9 million where concessions have been granted to borrowers experiencing financial difficulties, in an attempt to maximize collection. There were $0.6 million of unfunded commitments available for funding to the clients associated with these TDRs as of June 30, 2018.

The following table summarizes our loans modified in TDRs, broken out by portfolio segment and class of financing receivables at June 30, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Loans modified in TDRs:		
Commercial loans:		
Software/internet	$ 50,202	$ 73,455
Hardware	49,834	51,132
Private equity/venture capital	—	350
Life science/healthcare	25,460	19,235
Premium wine	3,048	3,198
Total commercial loans	128,544	147,370
Consumer loans:		
Other consumer loans	325	423
Total	$ 128,869	$ 147,793

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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Loans modified in TDRs during the period:				
Commercial loans:				
Software/internet	$ 14,783	$ 16,135	$ 14,783	$ 22,242
Hardware	1,954	—	3,448	—
Private equity/venture capital	—	—	—	—
Life science/healthcare	6,231	4,588	7,461	4,588
Premium wine	—	190	—	190
Total commercial loans	22,968	20,913	25,692	27,020
Consumer loans:				
Other consumer loans	—	—	325	—
Total consumer loans	—	—	325	—
Total loans modified in TDRs during the period (1)	$ 22,968	$ 20,913	$ 26,017	$ 27,020

(1) There were $8.5 million of partial charge-offs for both the three and six months ended June 30, 2018 and $12.5 million and $15.1 million of partial charge-offs during the three and six months ended June 30, 2017, respectively.

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. During the three and six months ended June 30, 2017, all new TDRs of $20.9 million and $27.0 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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
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	—
Premium wine	—	190	—	190
Total TDRs modified within the previous 12 months that defaulted in the period	$ 24,304	$ 190	$ 27,336	$ 190

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, 2018.

8. Short-Term Borrowings and Long-Term Debt

The following table represents outstanding short-term borrowings and long-term debt at June 30, 2018 and December 31, 2017:

			Carrying Value	
(Dollars in thousands)	Maturity	Principal value at June 30, 2018	June 30, 2018	December 31, 2017
Short-term borrowings:				
Short-term FHLB advances	July 2, 2018	$ 400,000	$ 400,000	$ 700,000
Federal funds purchased		—	—	330,000
Other short-term borrowings	(1)	17,246	17,246	3,730
Total short-term borrowings			$ 417,246	$ 1,033,730
Long-term debt:				
3.50% Senior Notes	January 29, 2025	$ 350,000	$ 347,470	$ 347,303
5.375% Senior Notes	September 15, 2020	350,000	348,502	348,189
Total long-term debt			$ 695,972	$ 695,492

(1) 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 $8.6 million and $17.0 million for the three and six months ended June 30,2018, respectively, and $9.0 million and $18.3 million for the three and six months ended June 30, 2017, respectively. The weighted average interest rate associated with our short-term borrowings was 2.04 percent as of June 30, 2018 and 1.39 percent as of December 31, 2017.

Available Lines of Credit

We have certain facilities in place to enable us to access short-term borrowings on a secured (using loans and AFS securities as collateral) and unsecured basis. These include repurchase agreements and uncommitted federal funds lines with various financial institutions. As of June 30, 2018, we did not have any borrowings outstanding against our uncommitted federal funds lines. We also pledge securities to the FHLB of San Francisco and the discount window at the FRB. The fair value of collateral pledged to the FHLB of San Francisco (comprised primarily of loans and U.S. Treasury securities) at June 30, 2018 totaled $3.8 billion, of which $3.4 billion was unused and available to support additional borrowings. The fair value of collateral pledged at the discount window of the FRB (comprised primarily of U.S. Treasury securities and U.S. agency debentures) at June 30, 2018 totaled $0.9 billion, all of which was unused and available to support additional borrowings.

9. Derivative Financial Instruments

We primarily use derivative financial instruments to manage 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.

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 2017 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, 2018 and December 31, 2017 were as follows:

	June 30, 2018			December 31, 2017		
		Fair Value			Fair Value	
(Dollars in thousands)	Notional or Contractual Amount	Derivative Assets (1)	Derivative Liabilities (1)	Notional or Contractual Amount	Derivative Assets (1)	Derivative Liabilities (1)
Derivatives not designated as hedging instruments:						
Currency exchange risks:						
Foreign exchange forwards	$ 501,372	$ 16,250	$ —	$ 50,889	$ 414	$ —
Foreign exchange forwards	243,969	—	9,636	425,055	—	5,201
Other derivative instruments:						
Equity warrant assets	227,490	143,725	—	211,253	123,763	—
Client foreign exchange forwards	2,582,993	81,395	—	2,203,643	95,035	—
Client foreign exchange forwards	2,305,484	—	73,323	2,092,207	—	90,253
Client foreign currency options	107,907	1,713	—	102,678	1,187	—
Client foreign currency options	107,907	—	1,713	102,678	—	1,187
Client interest rate derivatives (2)	919,033	6,422	—	726,984	11,753	—
Client interest rate derivatives	1,274,209	—	12,532	782,586	—	11,940
Total Derivatives not designated as hedging instruments		$ 249,505	$ 97,204		$ 232,152	$ 108,581

(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, 2018 reflects rule changes implemented by two central clearing houses that allow entities to elect 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 at June 30, 2018, reflect reductions of approximately $5.8 million of derivative assets that previously would have been reported on a gross basis and approximately $281.8 million in related notional amounts for these derivative assets cleared through central clearing houses.

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, 2018 and 2017 is as follows:

		Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	**Statement of income location**	**2018**	**2017**	**2018**	**2017**
Derivatives designated as hedging instruments:					
Interest rate risks:					
Net cash benefit associated with interest rate swaps	Interest expense—borrowings	$ —	$ 381	$ —	$ 935
Changes in fair value of interest rate swaps	Other noninterest income	—	(6)	—	(7)
Net gains associated with interest rate risk derivatives		$ —	$ 375	$ —	$ 928
Derivatives not designated as hedging instruments:					
Currency exchange risks:					
(Losses) gains on revaluations of internal foreign currency instruments, net	Other noninterest income	$ (319)	$ 14,596	$ 2,607	$ 18,704
Gains (losses) on internal foreign exchange forward contracts, net	Other noninterest income	459	(14,554)	(3,053)	(17,799)
Net gains (losses) associated with internal currency risk		$ 140	$ 42	$ (446)	$ 905
Other derivative instruments:					
(Losses) gains on revaluations of client foreign currency instruments, net	Other noninterest income	$ (2,748)	$ 2,375	$ 4,905	$ 5,129
Gains (losses) on client foreign exchange forward contracts, net	Other noninterest income	2,844	(2,190)	(4,270)	(4,479)
Net gains associated with client currency risk		$ 96	$ 185	$ 635	$ 650
Net gains on equity warrant assets	Gains on equity warrant assets, net	$ 19,061	$ 10,820	$ 38,252	$ 17,510
Net (losses) gains on other derivatives	Other noninterest income	$ (10)	$ (210)	$ 421	$ (486)

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, 2018 and December 31, 2017:

(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, 2018						
Derivative Assets:						
Foreign exchange forwards	$ 97,645	$ —	$ 97,645	$ (32,627)	$ (14,416)	$ 50,602
Foreign currency options	1,713	—	1,713	(973)	—	740
Client interest rate derivatives	6,422	—	6,422	(3,592)	(2,830)	—
Total derivative assets	105,780	—	105,780	(37,192)	(17,246)	51,342
Reverse repurchase, securities borrowing, and similar arrangements	37,379	—	37,379	(37,379)	—	—
Total	$ 143,159	$ —	$ 143,159	$ (74,571)	$ (17,246)	$ 51,342
December 31, 2017						
Derivative Assets:						
Foreign exchange forwards	$ 95,449	$ —	$ 95,449	$ (14,570)	$ (3,616)	$ 77,263
Foreign currency options	1,187	—	1,187	(557)	—	630
Client interest rate derivatives	11,753	—	11,753	(11,627)	(114)	12
Total derivative assets	108,389	—	108,389	(26,754)	(3,730)	77,905
Reverse repurchase, securities borrowing, and similar arrangements	247,876	—	247,876	(247,876)	—	—
Total	$ 356,265	$ —	$ 356,265	$ (274,630)	$ (3,730)	$ 77,905

(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, 2018 and December 31, 2017:

(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, 2018						
Derivative Liabilities:						
Foreign exchange forwards	$ 82,959	$ —	$ 82,959	$ (14,638)	$ (41,113)	$ 27,208
Foreign currency options	1,713	—	1,713	(772)	—	941
Client interest rate derivatives	12,532	—	12,532	—	(12,448)	84
Total derivative liabilities	97,204	—	97,204	(15,410)	(53,561)	28,233
Repurchase, securities lending, and similar arrangements	—	—	—	—	—	—
Total	$ 97,204	$ —	$ 97,204	$ (15,410)	$ (53,561)	$ 28,233
December 31, 2017						
Derivative Liabilities:						
Foreign exchange forwards	$ 95,454	$ —	$ 95,454	$ (10,997)	$ (69,110)	$ 15,347
Foreign currency options	1,187	—	1,187	(501)	(130)	556
Client interest rate derivatives	11,940	—	11,940	—	(11,924)	16
Total derivative liabilities	108,581	—	108,581	(11,498)	(81,164)	15,919
Repurchase, securities lending, and similar arrangements	—	—	—	—	—	—
Total	$ 108,581	$ —	$ 108,581	$ (11,498)	$ (81,164)	$ 15,919

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

10. Noninterest Income

On January 1, 2018, we adopted Topic 606 using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018, are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our previous accounting methodology under Topic 605. A summary of noninterest income for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Noninterest income:				
Gains on investment securities, net	$ 36,114	$ 17,630	$ 45,172	$ 33,600
Gains on equity warrant assets, net	19,061	10,820	38,252	17,510
Foreign exchange fees	34,077	26,108	67,904	52,355
Credit card fees	22,926	18,099	44,618	35,829
Deposit service charges	18,794	14,563	36,493	28,538
Client investment fees	29,452	12,982	52,327	22,008
Lending related fees	9,528	8,509	20,263	17,470
Letters of credit and standby letters of credit fees	8,347	7,006	16,529	13,645
Other	14,390	12,811	26,649	25,232
Total noninterest income	$ 192,689	$ 128,528	$ 348,207	$ 246,187

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 and investments in 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, 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 (i.e. lock-up agreements), changes in prevailing market prices, market conditions, the actual sales or distributions of securities, 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 outside of the scope of the new revenue standard 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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Gains on non-marketable and other equity securities, net	$ 36,114	$ 17,753	$ 45,172	$ 33,115
(Losses) gains on sales of available-for-sale securities, net	—	(123)	—	485
Total gains on investment securities, net	$ 36,114	$ 17,630	$ 45,172	$ 33,600

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 the new revenue standard 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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Equity warrant assets:				
Gains on exercises, net	$ 8,875	$ 3,121	$ 20,509	$ 11,345
Cancellations and expirations	(826)	(571)	(1,726)	(1,129)
Changes in fair value, net	11,012	8,270	19,469	7,294
Total net gains on equity warrant assets	$ 19,061	$ 10,820	$ 38,252	$ 17,510

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 the new revenue standard 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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Foreign exchange fees by instrument type:				
Spot contract commissions	$ 31,548	$ 23,583	$ 62,750	$ 46,007
Forward contract commissions	2,455	2,470	4,940	6,071
Option premium fees	74	55	214	277
Total foreign exchange fees	$ 34,077	$ 26,108	$ 67,904	$ 52,355

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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Credit card fees by instrument type:				
Card interchange fees, net	$ 18,137	$ 14,033	$ 35,697	$ 28,003
Merchant service fees	3,425	2,883	6,331	5,623
Card service fees	1,364	1,183	2,590	2,203
Total credit card fees	$ 22,926	$ 18,099	$ 44,618	$ 35,829

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.

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 receives 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 from 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, 2018 and 2017, is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Client investment fees by type:				
Sweep money market fees	$ 17,178	$ 6,474	$ 29,500	$ 10,870
Asset management fees (1)	5,730	4,111	11,088	7,490
Repurchase agreement fees	6,544	2,397	11,739	3,648
Total client investment fees (2)	$ 29,452	$ 12,982	$ 52,327	$ 22,008

(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.

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 the new revenue standard 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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Lending related fees by instrument type:				
Unused commitment fees	$ 7,827	$ 7,021	$ 16,584	$ 13,588
Other	1,701	1,488	3,679	3,882
Total lending related fees	$ 9,528	$ 8,509	$ 20,263	$ 17,470

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 the new revenue standard as it explicitly excludes noninterest income earned from our lending-related activities.

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 the new revenue standard.

Other noninterest income 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, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Other noninterest income by instrument type:				
Fund management fees	$ 5,929	$ 5,536	$ 11,665	$ 10,705
Net gains on revaluation of foreign currency instruments, net of foreign exchange forward contracts (1)	236	227	189	1,555
Other service revenue	8,225	7,048	14,795	12,972
Total other noninterest income	$ 14,390	$ 12,811	$ 26,649	$ 25,232

(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 presents our revenues from contracts with customers disaggregated by revenue source and segment for the three and six months ended June 30, 2018:

Three months ended June 30, 2018 (Dollars in thousands)	Global Commercial Bank	SVB Private Bank	SVB Capital	Other Income	Total
Revenue from contracts with customers:					
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
Client investment fees	11,895	379	—	17,178	29,452
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)	14,982	10	22,569	32,669	70,230
Total noninterest income	$ 113,245	$ 564	$ 28,498	$ 50,382	$ 192,689

(1) Amounts are accounted for under separate guidance than ASC 606.

Six months ended June 30, 2018 (Dollars in thousands)	Global Commercial Bank	SVB Private Bank	SVB Capital	Other Income	Total
Revenue from contracts with customers:					
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
Client investment fees	22,145	681	—	29,501	52,327
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)	22,315	9	45,744	46,318	114,386
Total noninterest income	$ 212,591	$ 1,072	$ 57,409	$ 77,135	$ 348,207

(1) Amounts are accounted for under separate guidance than ASC 606.

11. Other Noninterest Expense

A summary of other noninterest expense for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Lending and other client related processing costs	$ 7,403	$ 6,332	$ 10,603	$ 11,871
Data processing services	2,703	2,428	5,195	5,010
Telephone	2,378	2,671	4,756	5,374
Dues and publications	845	677	1,694	1,472
Postage and supplies	813	652	1,480	1,401
Other	4,670	7,639	9,778	11,478
Total other noninterest expense	$ 18,812	$ 20,399	$ 33,506	$ 36,606

12. Segment Reporting

We have three reportable segments for management reporting purposes: Global Commercial Bank, SVB Private Bank and SVB Capital. 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 loans funded. 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 three 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, global trade finance, and other services. It serves clients within the United States, 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.
  - Our **Wine** practice 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, 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.

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, 2018 and 2017 is as follows:

(Dollars in thousands)	Global Commercial Bank (1)	SVB Private Bank	SVB Capital (1)	Other Items (2)	Total
Three months ended June 30, 2018					
Net interest income	$ 409,057	$ 15,645	$ 9	$ 41,732	$ 466,443
Provision for credit losses	(27,356)	(300)	—	(1,424)	(29,080)
Noninterest income	113,245	564	28,498	50,382	192,689
Noninterest expense (3)	(197,695)	(5,927)	(5,666)	(96,451)	(305,739)
Income (loss) before income tax expense (4)	$ 297,251	$ 9,982	$ 22,841	$ (5,761)	$ 324,313
Total average loans, net of unearned income	$ 21,714,870	$ 2,777,617	$ —	$ 366,016	$ 24,858,503
Total average assets (5)	52,540,865	2,515,984	369,841	(1,006,044)	54,420,646
Total average deposits	45,991,701	1,480,162	—	500,088	47,971,951
Three months ended June 30, 2017					
Net interest income	$ 311,051	$ 14,742	$ 16	$ 16,887	$ 342,696
Provision for credit losses	(14,856)	(329)	—	(621)	(15,806)
Noninterest income	83,904	536	15,019	29,069	128,528
Noninterest expense (3)	(176,702)	(4,050)	(6,192)	(64,302)	(251,246)
Income (loss) before income tax expense (4)	$ 203,397	$ 10,899	$ 8,843	$ (18,967)	$ 204,172
Total average loans, net of unearned income	$ 17,907,635	$ 2,365,464	$ —	$ 235,442	$ 20,508,541
Total average assets (5)	45,478,211	2,397,188	355,292	(681,327)	47,549,364
Total average deposits	40,477,823	1,302,890	—	357,933	42,138,646
Six months ended June 30, 2018					
Net interest income	$ 778,924	$ 31,892	$ 16	$ 75,474	$ 886,306
Provision for credit losses	(52,630)	(2,022)	—	(2,400)	(57,052)
Noninterest income	212,591	1,072	57,409	77,135	348,207
Noninterest expense (3)	(382,261)	(11,969)	(10,713)	(166,213)	(571,156)
Income (loss) before income tax expense (4)	$ 556,624	$ 18,973	$ 46,712	$ (16,004)	$ 606,305
Total average loans, net of unearned income	$ 21,199,897	$ 2,722,444	$ —	$ 413,421	$ 24,335,762
Total average assets (5)	51,252,398	2,553,024	371,572	(777,378)	53,399,616
Total average deposits	45,022,054	1,526,038	—	496,078	47,044,170
Six months ended June 30, 2017					
Net interest income	$ 586,929	$ 28,352	$ 16	$ 37,392	$ 652,689
Provision for credit losses	(43,745)	(1,119)	—	(1,676)	(46,540)
Noninterest income	163,423	1,254	31,794	49,716	246,187
Noninterest expense (3)	(349,548)	(7,968)	(9,664)	(121,699)	(488,879)
Income (loss) before income tax expense (4)	$ 357,059	$ 20,519	$ 22,146	$ (36,267)	$ 363,457
Total average loans, net of unearned income	$ 17,778,065	$ 2,305,723	$ —	$ 206,353	$ 20,290,141
Total average assets (5)	44,188,162	2,335,350	364,036	(456,138)	46,431,410
Total average deposits	39,393,219	1,319,776	—	341,618	41,054,613

(1) Global Commercial Bank's and SVB Capital'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 and gains or losses on the sale of fixed income investments and 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 $5.6 million and $7.2 million for the three months ended June 30, 2018 and 2017, respectively, and $11.1 million and $13.4 million for the six months ended June 30, 2018 and 2017, respectively.

(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.

13. 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, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018	December 31, 2017
Loan commitments available for funding: (1)		
Fixed interest rate commitments	$ 1,803,673	$ 1,478,157
Variable interest rate commitments	14,904,556	14,034,169
Total loan commitments available for funding	16,708,229	15,512,326
Commercial and standby letters of credit (2)	2,020,131	1,950,211
Total unfunded credit commitments	$ 18,728,360	$ 17,462,537
Commitments unavailable for funding (3)	$ 2,747,090	$ 2,117,057
Allowance for unfunded credit commitments (4)	54,104	51,770

(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, 2018. 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	$ 1,850,099	$ 43,050	$ 1,893,149	$ 1,893,149
Performance standby letters of credit	99,750	13,345	113,095	113,095
Commercial letters of credit	13,836	51	13,887	13,887
Total	$ 1,963,685	$ 56,446	$ 2,020,131	$ 2,020,131

Deferred fees related to financial and performance standby letters of credit were $11.1 million at June 30, 2018 and $12.4 million at December 31, 2017. At June 30, 2018, collateral in the form of cash of $961.0 million 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 makes 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, 2018:

(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
Shanghai Yangpu Venture Capital Fund (LP)	924	—	6.8
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
Capital Preferred Return Fund, LP	12,688	—	20.0
Growth Partners, LP	24,670	1,340	33.0
Debt funds (equity method accounting)	58,493	—	Various
Other fund investments (2)	304,184	9,685	Various
Total	$ 466,213	$ 16,926	

(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 232 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 2017 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, 2018:

(Dollars in thousands)	Unfunded Commitments
Strategic Investors Fund, LP	$ 1,338
Capital Preferred Return Fund, LP	2,700
Growth Partners, LP	1,895
Total	$ 5,933

14. 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 2014 and subsequent tax years remain open to full examination. Our California tax returns for 2013 and subsequent tax years remain open to full examination.

At June 30, 2018, our unrecognized tax benefit was $13.6 million, the recognition of which would reduce our income tax expense by $10.5 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 or six months ended June 30, 2018.

15. 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 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, 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.

Interest rate derivative 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.

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.

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.

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, 2018:

(Dollars in thousands)	Level 1	Level 2	Level 3	Balance at June 30, 2018
Assets:				
Available-for-sale securities:				
U.S. Treasury securities	$ 5,733,070	$ —	$ —	$ 5,733,070
U.S. agency debentures	—	1,485,864	—	1,485,864
Residential mortgage-backed securities:				
Agency-issued collateralized mortgage obligations—fixed rate	—	2,038,134	—	2,038,134
Agency-issued collateralized mortgage obligations—variable rate	—	336,298	—	336,298
Total available-for-sale securities	5,733,070	3,860,296	—	9,593,366
Non-marketable and other equity securities (fair value accounting):				
Non-marketable securities:				
Venture capital and private equity fund investments measured at net asset value	—	—	—	343,119
Venture capital and private equity fund investments not measured at net asset value (1)	—	—	1,001	1,001
Other equity securities in public companies	835	3,577	—	4,412
Total non-marketable and other equity securities (fair value accounting)	835	3,577	1,001	348,532
Other assets:				
Foreign exchange forward and option contracts	—	99,358	—	99,358
Equity warrant assets	—	5,972	137,753	143,725
Client interest rate derivatives	—	6,422	—	6,422
Total assets	$ 5,733,905	$ 3,975,625	$ 138,754	$ 10,191,403
Liabilities:				
Foreign exchange forward and option contracts	$ —	$ 84,672	$ —	$ 84,672
Client interest rate derivatives	—	12,532	—	12,532
Total liabilities	$ —	$ 97,204	$ —	$ 97,204

(1) Included in Level 3 assets is $0.9 million 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, 2017:

(Dollars in thousands)	Level 1	Level 2	Level 3	Balance at December 31, 2017
Assets:				
Available-for-sale securities:				
U.S. Treasury securities	$ 6,840,502	$ —	$ —	$ 6,840,502
U.S. agency debentures	—	1,567,128	—	1,567,128
Residential mortgage-backed securities:				
Agency-issued collateralized mortgage obligations—fixed rate	—	2,267,035	—	2,267,035
Agency-issued collateralized mortgage obligations—variable rate	—	373,730	—	373,730
Equity securities	158	72,111	—	72,269
Total available-for-sale securities	6,840,660	4,280,004	—	11,120,664
Non-marketable and other equity securities (fair value accounting):				
Non-marketable securities:				
Venture capital and private equity fund investments measured at net asset value	—	—	—	127,192
Venture capital and private equity fund investments not measured at net asset value (1)	—	—	919	919
Other equity securities in public companies (1)	310	—	—	310
Total non-marketable and other equity securities (fair value accounting)	310	—	919	128,421
Other assets:				
Foreign exchange forward and option contracts	—	96,636	—	96,636
Equity warrant assets	—	2,432	121,331	123,763
Client interest rate derivatives	—	11,753	—	11,753
Total assets	$ 6,840,970	$ 4,390,825	$ 122,250	$ 11,481,237
Liabilities:				
Foreign exchange forward and option contracts	$ —	$ 96,641	$ —	$ 96,641
Client interest rate derivatives	—	11,940	—	11,940
Total liabilities	$ —	$ 108,581	$ —	$ 108,581

(1) Included in Level 1 and Level 3 assets are $0.2 million and $0.8 million, respectively, 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, 2018 and 2017:

(Dollars in thousands)	Beginning Balance	Total Realized and Unrealized Gains (Losses) Included in Income	Sales	Issuances	Distributions and Other Settlements	Transfers Out of Level 3	Ending Balance
Three months ended June 30, 2018							
Non-marketable and other 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
Three months ended June 30, 2017							
Non-marketable and other securities (fair value accounting):							
Venture capital and private equity fund investments not measured at net asset value (1)	$ 2,040	$ (143)	$ —	$ —	$ —	$ —	$ 1,897
Other assets:							
Equity warrant assets (2)	122,199	10,586	(6,500)	3,419	—	(752)	128,952
Total assets	$ 124,239	$ 10,443	$ (6,500)	$ 3,419	$ —	$ (752)	$ 130,849
Six months ended June 30, 2018							
Non-marketable and other securities (fair value accounting):							
Other venture capital investments (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
Six months ended June 30, 2017							
Non-marketable and other securities (fair value accounting):							
Other venture capital investments (1)	$ 2,040	$ (143)	$ —	$ —	$ —	$ —	$ 1,897
Other assets:							
Equity warrant assets (2)	128,813	17,195	(23,586)	7,449	—	(919)	128,952
Total assets	$ 130,853	$ 17,052	$ (23,586)	$ 7,449	$ —	$ (919)	$ 130,849

(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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Non-marketable and other securities (fair value accounting):				
Venture capital and private equity fund investments not measured at net asset value (1)	$ —	$ (143)	$ 82	$ (143)
Other assets:				
Equity warrant assets (2)	10,236	7,984	18,147	7,440
Total unrealized gains, net	$ 10,236	$ 7,841	$ 18,229	$ 7,297
Unrealized (losses) gains attributable to noncontrolling interests (1)	$ —	$ (127)	$ 73	$ (127)

(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, 2018 and December 31, 2017. 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, 2018:				
Venture capital and private equity fund investments (fair value accounting)	$ 1,001	Private company equity pricing	(1)	(1)
Equity warrant assets (public portfolio)	2,065	Black-Scholes option pricing model	Volatility	48.6%
			Risk-Free interest rate	2.8
			Sales restrictions discount (2)	18.6
Equity warrant assets (private portfolio)	135,688	Black-Scholes option pricing model	Volatility	37.8
			Risk-Free interest rate	2.5
			Marketability discount (3)	16.6
			Remaining life assumption (4)	45.0
December 31, 2017:				
Venture capital and private equity fund investments (fair value accounting)	$ 919	Private company equity pricing	(1)	(1)
Equity warrant assets (public portfolio)	1,936	Black-Scholes option pricing model	Volatility	47.9%
			Risk-Free interest rate	2.1
			Sales restrictions discount (2)	15.5
Equity warrant assets (private portfolio)	119,395	Black-Scholes option pricing model	Volatility	36.7
			Risk-Free interest rate	1.8
			Marketability discount (3)	16.4
			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 cancellations and exercises. At June 30, 2018, the weighted average contractual remaining term was 6.1 years, compared to our estimated remaining life of 2.7 years. On a quarterly basis, a sensitivity analysis is performed on our remaining life assumption.

For the three and six months ended June 30, 2018 and 2017, 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, 2018 and 2017 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, 2018 and December 31, 2017:

		Estimated Fair Value			
(Dollars in thousands)	Carrying Amount	Total	Level 1	Level 2	Level 3
June 30, 2018:					
Financial assets:					
Cash and cash equivalents	$ 2,712,101	$ 2,712,101	$ 2,712,101	$ —	$ —
Held-to-maturity securities	15,898,263	15,493,995	—	15,493,995	—
Non-marketable securities not measured at net asset value	116,484	116,484	—	—	116,484
Non-marketable securities measured at net asset value	136,010	136,010	—	—	—
Net commercial loans	22,849,701	23,139,492	—	—	23,139,492
Net consumer loans	2,859,782	2,872,681	—	—	2,872,681
FHLB and Federal Reserve Bank stock	58,864	58,864	—	—	58,864
Financial liabilities:					
Short-term borrowings	417,246	417,246	417,246	—	—
Non-maturity deposits (1)	48,825,291	48,825,291	48,825,291	—	—
Time deposits	62,004	61,732	—	61,732	—
3.50% Senior Notes	347,470	339,283	—	339,283	—
5.375% Senior Notes	348,502	364,980	—	364,980	—
Off-balance sheet financial assets:					
Commitments to extend credit	—	23,553	—	—	23,553
December 31, 2017:					
Financial assets:					
Cash and cash equivalents	$ 2,923,075	$ 2,923,075	$ 2,923,075	$ —	$ —
Held-to-maturity securities	12,663,455	12,548,280	—	12,548,280	—
Non-marketable securities (cost and equity method accounting) not measured at net asset value	120,019	126,345	—	—	126,345
Non-marketable securities (cost and equity method accounting) measured at net asset value	228,399	331,496	—	—	—
Net commercial loans	20,238,247	20,520,623	—	—	20,520,623
Net consumer loans	2,613,045	2,593,538	—	—	2,593,538
FHLB and Federal Reserve Bank stock	60,020	60,020	—	—	60,020
Financial liabilities:					
Short-term borrowings	1,033,730	1,033,730	1,033,730	—	—
Non-maturity deposits (1)	44,206,929	44,206,929	44,206,929	—	—
Time deposits	47,146	46,885	—	46,885	—
3.50% Senior Notes	347,303	352,058	—	352,058	—
5.375% Senior Notes	348,189	374,483	—	374,483	—
Off-balance sheet financial assets:					
Commitments to extend credit	—	22,208	—	—	22,208

(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, 2018:

(Dollars in thousands)	Carrying Amount	Fair Value	Unfunded Commitments
Non-marketable securities (fair value accounting):			
Venture capital and private equity fund investments (1)	$ 343,119	$ 343,119	$ 13,639
Non-marketable securities (equity method accounting):			
Venture capital and private equity fund investments (2)	102,838	102,838	4,943
Debt funds (2)	14,215	14,215	—
Other investments (2)	18,957	18,957	886
Total	$ 479,129	$ 479,129	$ 19,468

(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 $97.8 million and $4.5 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.

16. 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.

17. 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 2017 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, including the impact of the Tax Cuts and Jobs Act;
- 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; and
- Other factors as discussed in “Risk Factors” under Part I, Item 1A in our 2017 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 2017 Form 10-K.

Reclassifications

Certain prior period amounts, primarily related to the adoption of new accounting guidance, have been reclassified to conform to current period presentations.

Management’s Overview of Second Quarter 2018 Performance

Overall, we had an excellent second quarter in 2018, which was marked by strong growth in net interest income, outstanding total client funds growth, higher core fee income, continued stable credit quality and strong gains on equity warrants and investment securities. Additionally, we saw higher noninterest expense, primarily related to the write-off of previously capitalized costs in connection with the Economic Growth, Regulatory Relief and Consumer Protection Act, as well as expenses incurred associated with increased investment in client experience and employee enablement and incentive compensation tied to our outperformance. 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, 2018 (compared to the three months ended June 30, 2017, where applicable) is as follows:

BALANCE SHEET

Assets. $54.4 billion in average total assets (up 14.5%). $55.9 billion in period-end total assets (up 15.4%).

Loans. $24.9 billion in average total loan balances, net of unearned income (up 21.2%). $26.0 billion in period-end total loan balances, net of unearned income (up 23.9%).

Total Client Funds. (on-balance sheet deposits and off-balance sheet client investment funds). $119.3 billion in average total client fund balances (up 30.7%). $124.7 billion in period-end total client fund balances (up 32.1%).

Fixed Income Investments. $25.2 billion in average fixed income investment securities (up 16.9%). $25.5 billion in period-end fixed income investment securities (up 15.8%).

EARNINGS

EPS. Earnings per diluted share of $4.42 (up 90.5%).

Net Income. Consolidated net income available to common stockholders of $237.8 million (up 93.0%).

- Net interest income of $466.4 million (up 36.1%).
- Net interest margin of 3.59% (up 59 bps).
- Noninterest income of $192.7 million (up 49.9%), with non-GAAP core fee income+ of $123.1 million (up 41.1%).
- Noninterest expense of $305.7 million (up 21.7%).

ROE. Return on average equity (annualized) ("*ROE*") performance of 20.82%.

Operating Efficiency Ratio. Operating efficiency ratio of 46.39%.

CAPITAL

Capital. Continued strong capital levels, 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 11.76%.
- Tier 1 risk-based capital ratio of 13.10% and 11.76%.
- Total risk-based capital ratio of 14.03% and 12.72%.
- Tier 1 leverage ratio of 8.81% and 7.72%.

CREDIT QUALITY

Credit Quality. Continued disciplined underwriting.

- Allowance for loan losses of 1.10% as a percentage of period-end total gross loans.
- Provision for loan losses of 0.42% as a percentage of period-end total gross loans (annualized).
- Net loan charge-offs of 0.22% 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 metric. (See the non-GAAP reconciliation under "Results of Operations—Noninterest Income")

A summary of our performance for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands, except per share data, employees and ratios)	2018	2017	% Change	2018	2017	% Change
Diluted earnings per common share	$ 4.42	$ 2.32	90.5 %	$ 8.05	$ 4.22	90.8 %
Net income available to common stockholders	237,798	123,193	93.0	432,759	224,676	92.6
Net interest income	466,443	342,696	36.1	886,306	652,689	35.8
Net interest margin	3.59%	3.00%	59 bps	3.49%	2.94%	55 bps
Provision for credit losses	$ 29,080	$ 15,806	84.0 %	$ 57,052	$ 46,540	22.6 %
Noninterest income	192,689	128,528	49.9	348,207	246,187	41.4
Noninterest expense	305,739	251,246	21.7	571,156	488,879	16.8
Non-GAAP core fee income (1)	123,124	87,267	41.1	238,134	169,845	40.2
Non-GAAP noninterest income, net of noncontrolling interests (1)	183,244	118,992	54.0	325,738	230,092	41.6
Non-GAAP noninterest expense, net of noncontrolling interests(2)	305,512	251,023	21.7	570,961	488,487	16.9
Balance Sheet:						
Average available-for-sale securities	$ 10,048,423	$ 12,393,079	(18.9) %	$ 10,396,533	$ 12,471,237	(16.6) %
Average held-to-maturity securities	15,112,154	9,128,407	65.6	14,178,427	8,865,752	59.9
Average loans, net of unearned income	24,858,503	20,508,541	21.2	24,335,762	20,290,141	19.9
Average noninterest-bearing demand deposits	39,814,450	34,629,070	15.0	38,887,766	33,674,549	15.5
Average interest-bearing deposits	8,157,501	7,509,576	8.6	8,156,404	7,380,064	10.5
Average total deposits	47,971,951	42,138,646	13.8	47,044,170	41,054,613	14.6
Earnings Ratios:						
Return on average assets (annualized) (3)	1.75%	1.04%	68.3 %	1.63%	0.98%	66.3 %
Return on average SVBFG stockholders' equity (annualized) (4)	20.82	12.75	63.3	19.51	11.91	63.8
Asset Quality Ratios:						
Allowance for loan losses as a % of total period-end gross loans	1.10%	1.12%	(2) bps	1.10%	1.12%	(2) bps
Allowance for loan losses for performing loans as a % of total gross performing loans	0.90	0.93	(3)	0.90	0.93	(3)
Gross loan charge-offs as a % of average total gross loans (annualized)	0.25	0.49	(24)	0.21	0.39	(18)
Net loan charge-offs as a % of average total gross loans (annualized)	0.22	0.44	(22)	0.18	0.34	(16)
Capital Ratios:						
CET 1 risk-based capital ratio	12.92%	13.05%	(13) bps	12.92%	13.05%	(13) bps
Tier 1 risk-based capital ratio	13.10	13.43	(33)	13.10	13.43	(33)
Total risk-based capital ratio	14.03	14.39	(36)	14.03	14.39	(36)
Tier 1 leverage ratio	8.81	8.40	41	8.81	8.40	41
Tangible common equity to tangible assets (5)	8.34	8.06	28	8.34	8.06	28
Tangible common equity to risk-weighted assets (5)	12.68	13.11	(43)	12.68	13.11	(43)
Bank CET 1 risk-based capital ratio	11.76	12.59	(83)	11.76	12.59	(83)
Bank tier 1 risk-based capital ratio	11.76	12.59	(83)	11.76	12.59	(83)
Bank total risk-based capital ratio	12.72	13.59	(87)	12.72	13.59	(87)
Bank tier 1 leverage ratio	7.72	7.66	6	7.72	7.66	6
Bank tangible common equity to tangible assets (5)	7.39	7.58	(19)	7.39	7.58	(19)
Bank tangible common equity to risk-weighted assets (5)	11.52	12.65	(113)	11.52	12.65	(113)
Other Ratios:						
GAAP operating efficiency ratio (6)	46.39%	53.32%	(13.0) %	46.27%	54.39%	(14.9) %
Non-GAAP operating efficiency ratio (2)	46.88	54.32	(13.7)	46.98	55.28	(15.0)
Book value per common share (7)	$ 87.53	$ 74.02	18.3	$ 87.53	$ 74.02	18.3
Other Statistics:						
Average full-time equivalent employees	2,591	2,372	9.2 %	2,545	2,358	7.9 %
Period-end full-time equivalent employees	2,626	2,380	10.3	2,626	2,380	10.3

(1) See "Results of Operations–Noninterest Income" for a description and reconciliation of non-GAAP core fee income and noninterest income.

(2) See "Results of Operations–Noninterest Expense" for a description and reconciliation of non-GAAP noninterest expense and non-GAAP 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 taxable-equivalent net interest income plus noninterest income.
(7) 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, 2018 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 2017 Form 10-K.

Results of Operations

Net Interest Income and Margin (Fully Taxable Equivalent Basis)

Net interest income is defined as the difference between interest earned on loans, fixed income investment portfolio (available-for-sale and held-to-maturity securities) and short-term investment securities and the interest paid on funding sources which consist primarily of interest-bearing deposits and borrowings. Net interest income is our principal source of revenue. Net interest margin is defined as the amount of annualized net interest income, on a fully taxable equivalent basis, expressed 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 for the three and six months ended June 30, 2018 and 35.0 percent for the three and six months ended June 30, 2017.

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 composition 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)	2018 Compared to 2017 Three months ended June 30, increase (decrease) due to change in Volume	Rate	Total	2018 Compared to 2017 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, trade receivables purchased and other short-term investment securities	$ (4,105)	$ 2,969	$ (1,136)	$ (3,200)	$ 4,684	$ 1,484
Fixed income investment portfolio (taxable)	23,256	18,372	41,628	42,418	33,884	76,302
Fixed income investment portfolio (non-taxable)	8,315	28	8,343	13,940	(146)	13,794
Loans, net of unearned income	57,797	22,303	80,100	104,296	45,537	149,833
Increase in interest income, net	85,263	43,672	128,935	157,454	83,959	241,413
Interest expense:						
Interest bearing checking and savings accounts	25	—	25	65	1	66
Money market deposits	554	3,500	4,054	1,087	5,324	6,411
Money market deposits in foreign offices	1	(2)	(1)	4	(3)	1
Time deposits	4	4	8	1	3	4
Sweep deposits in foreign offices	(8)	(4)	(12)	(21)	(8)	(29)
Total increase in deposits expense	576	3,498	4,074	1,136	5,317	6,453
Short-term borrowings	568	1	569	711	172	883
3.50% Senior Notes	3	—	3	6	—	6
5.375% Senior Notes	8	—	8	17	—	17
Junior Subordinated Debentures	(831)	—	(831)	(1,663)	—	(1,663)
6.05% Subordinated Notes	(196)	—	(196)	(467)	—	(467)
Total (decrease) increase in borrowings expense	(448)	1	(447)	(1,396)	172	(1,224)
Increase (decrease) in interest expense, net	128	3,499	3,627	(260)	5,489	5,229
Increase in net interest income	$ 85,135	$ 40,173	$ 125,308	$ 157,714	$ 78,470	$ 236,184

Net Interest Income (Fully Taxable Equivalent Basis)

Three months ended June 30, 2018 and 2017

Net interest income increased by $125.3 million to $468.5 million for the three months ended June 30, 2018, compared to $343.2 million for the comparable 2017 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 and software/internet loan portfolios and rate increases subsequent to June 30, 2017. In addition, we saw an increase in interest earned on our fixed income investment securities portfolio reflective of higher average fixed income investment securities balances driven by higher average deposit balances as well as an increase in yield from rate increases.

The main factors affecting interest income for the three months ended June 30, 2018, compared to the comparable 2017 period are discussed below:

- *Interest income* for the three months ended June 30, 2018 increased by $128.9 million due primarily to:
  - An $80.1 million increase in interest income on loans to $330.3 million for the three months ended June 30, 2018, compared to $250.2 million for the comparable 2017 period. The increase was reflective of an increase in average loan balances of $4.3 billion and an increase in the overall loan yield of 44 basis points to 5.33 percent from 4.89 percent. Gross loan yields, excluding loan interest recoveries and loan fees, increased 52 basis points to 4.72 percent from 4.20 percent, reflective primarily of the benefit of interest rate increases. Loan fee yields were down three basis points to 61 basis points for the three months ended June 30, 2018,
  - A $50.0 million increase in interest income on fixed income investment securities to $146.9 million for the three months ended June 30, 2018, compared to $96.9 million for the comparable 2017 period. The increase was reflective of an increase in average fixed income investments of $3.6 billion due to growth in average deposit balances and an increase in our fixed income investment securities yield of 53 basis points to 2.34 percent from 1.81 percent resulting primarily from higher reinvestment yields on maturing fixed income investments as well as higher yields on new purchases due to interest rate increases, and

- A $1.1 million decrease in interest income from our interest earning cash and short-term investment securities. The decrease was due primarily to a decrease of $1.6 billion in average interest-earning Federal Reserve cash balances.

- *Interest expense* for the three months ended June 30, 2018 increased by $3.6 million due primarily to:
  - A $4.1 million increase in deposits interest expense due primarily to an increase in interest paid on our interest-bearing money market deposits as a result of market rate adjustments, and
  - A $0.4 million decrease in borrowings interest expense primarily due to the repayment of our 6.05% Subordinated Notes and the redemption of our Junior Subordinated Debentures in 2017.

The main factors affecting interest income and interest expense for the six months ended June 30, 2018, compared to the comparable 2017 period are discussed below:

- *Interest income* for the six months ended June 30, 2018 increased by $241.4 million due primarily to:
  - A $149.8 million increase in interest income on loans to $627.4 million for the six months ended June 30, 2018, compared to $477.5 million for the comparable 2017 period. The increase was reflective of an increase in average loan balances of $4.0 billion and an increase in the overall loan yield of 45 basis points to 5.20 percent from 4.75 percent. Gross loan yields, excluding loan interest recoveries and loan fees, increased to 4.64 percent from 4.12 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 46.8 percent and 42.2 percent of our total gross loan portfolio at June 30, 2018 and 2017, respectively. The increase in gross loan yields of 52 basis points were partially offset by a decrease in fee income from early pay-offs reflective of the increasing rate environment,
  - A $90.1 million increase in interest income on fixed income investment securities to $277.8 million for the six months ended June 30, 2018, compared to $187.7 million for the comparable 2017 period. The increase was reflective of an increase in average fixed income investments of $3.2 billion due to growth in average deposit balances and an increase in our fixed income investment securities yield of 51 basis points to 2.28 percent from 1.77 percent resulting primarily from higher reinvestment yields on maturing fixed income investments as well as higher yields on new purchases due to interest rate increases, and
  - A $1.5 million increase in interest income from our interest earning cash and short-term investment securities. The increase was due to the benefit from the impact of the increases in the Federal Funds target rate, offset by lower average balances of $0.7 billion.
- *Interest expense* for the six months ended June 30, 2018 increased by $5.2 million primarily due to:
  - An increase in deposits interest expense of $6.5 million, due primarily to an increase in interest paid on our interest-bearing money market deposits as a result of market rate adjustments, and
  - A $1.2 million decrease in borrowings interest expense primarily due to the repayment of our 6.05% Subordinated Notes and the redemption of our Junior Subordinated Debentures in 2017.

Net Interest Margin (Fully Taxable Equivalent Basis)

Three months ended June 30, 2018 and 2017

- Our net interest margin increased by 59 basis points to 3.59 percent for the three months ended June 30, 2018, compared to 3.00 percent for the comparable 2017 period. The higher margin during the second quarter of 2018 was reflective primarily of the increases in the Federal Funds target rate since the second quarter of 2017 as well as a shift in the mix of the growth in our interest-earning assets to higher-yielding loans and fixed income investment securities from our interest earning cash and other short-term investment securities. Average loans and fixed income investment securities represented 47.5 percent and 48.0 percent, respectively, of quarter-to-date average interest earnings assets compared to 44.6 percent and 46.9 percent, respectively, for the comparable 2017 period.

Six months ended June 30, 2018 and 2017

- Our net interest margin increased by 55 basis points to 3.49 percent for the six months ended June 30, 2018, compared to 2.94 percent for the comparable 2017 period. The higher margin for the six months ended June 30, 2018, was reflective primarily of the increases in the Federal Funds target rate since June 30, 2017, as well as a shift in the mix of the growth in our interest-earning assets to higher-yielding loans and fixed income investment securities from our interest earning cash and other short-term investment securities. Average loans and fixed income investment securities

represented 47.3 percent and 47.8 percent, respectively, of year-to-date average interest earnings assets compared to 45.3 percent and 47.6 percent, respectively, for the comparable 2017 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, 2018 and 2017:

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Average Balances, Rates and Yields for the Three Months Ended June 30, 2018 and 2017

(Dollars in thousands)	Three months ended June 30, 2018 Average Balance	2018 Interest Income/ Expense	2018 Yield/ Rate	2017 Average Balance	2017 Interest Income/ Expense	2017 Yield/ Rate
Interest-earning assets:						
Federal Reserve deposits, federal funds sold, securities purchased under agreements to resell and other short-term investment securities (1)	$ 2,346,820	$ 6,187	1.06%	$ 3,903,377	$ 7,323	0.75%
Investment securities: (2)						
Available-for-sale securities:						
Taxable	10,048,423	46,606	1.86	12,393,079	48,271	1.56
Held-to-maturity securities:						
Taxable	13,969,843	90,544	2.60	8,964,785	47,251	2.11
Non-taxable (3)	1,142,311	9,704	3.41	163,622	1,361	3.34
Total loans, net of unearned income (4) (5)	24,858,503	330,297	5.33	20,508,541	250,197	4.89
Total interest-earning assets	52,365,900	483,338	3.70	45,933,404	354,403	3.10
Cash and due from banks	534,908			356,884		
Allowance for loan losses	(280,679)			(250,167)		
Other assets (6)	1,800,517			1,509,243		
Total assets	$ 54,420,646			$ 47,549,364		
Funding sources:						
Interest-bearing liabilities:						
Interest bearing checking and savings accounts	$ 554,411	$ 106	0.08%	$ 424,070	$ 81	0.08%
Money market deposits	6,265,809	6,021	0.39	5,689,552	1,967	0.14
Money market deposits in foreign offices	220,334	21	0.04	210,069	22	0.04
Time deposits	56,755	23	0.16	47,376	15	0.13
Sweep deposits in foreign offices	1,060,192	100	0.04	1,138,509	112	0.04
Total interest-bearing deposits	8,157,501	6,271	0.31	7,509,576	2,197	0.12
Short-term borrowings	121,098	580	1.92	2,690	11	1.64
3.50% Senior Notes	347,415	3,146	3.63	347,087	3,143	3.63
5.375% Senior Notes	348,399	4,861	5.60	347,785	4,853	5.60
Junior Subordinated Debentures	—	—	—	54,435	831	6.12
6.05% Subordinated Notes	—	—	—	30,934	196	2.54
Total interest-bearing liabilities	8,974,413	14,858	0.66	8,292,507	11,231	0.54
Portion of noninterest-bearing funding sources	43,391,487			37,640,897		
Total funding sources	52,365,900	14,858	0.11	45,933,404	11,231	0.10
Noninterest-bearing funding sources:						
Demand deposits	39,814,450			34,629,070		
Other liabilities	908,594			617,097		
SVBFG stockholders' equity	4,581,591			3,874,880		
Noncontrolling interests	141,598			135,810		
Portion used to fund interest-earning assets	(43,391,487)			(37,640,897)		
Total liabilities, noncontrolling interest, and SVBFG stockholders' equity	$ 54,420,646			$ 47,549,364		
Net interest income and margin		$ 468,480	3.59%		$ 343,172	3.00%
Total deposits	$ 47,971,951			$ 42,138,646		
Reconciliation to reported net interest income:						
Adjustments for taxable equivalent basis		(2,037)			(476)	
Net interest income, as reported		$ 466,443			$ 342,696	

(1) Includes average interest-earning deposits in other financial institutions of $0.9 billion and $1.0 billion for the three months ended June 30, 2018, and 2017, respectively. For the three months ended June 30, 2018, and 2017, balances also include $1.3 billion and $2.8 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 the three months ended June 30, 2018, and 35.0 percent for the three months ended June 30, 2017.
(4) Nonaccrual loans are reflected in the average balances of loans.
(5) Interest income includes loan fees of $38 million and $33 million for the three months ended June 30, 2018, and 2017, respectively.
(6) Average investment securities of $773 million and $663 million for the three months ended June 30, 2018, and 2017, respectively, were classified as other assets as they were noninterest-earning assets. These investments consisted primarily of non-marketable and other securities.

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Average Balances, Rates and Yields for the Six Months Ended June 30, 2018 and 2017

	Six months ended June 30,					
	2018			2017		
(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)	$ 2,529,384	$ 11,943	0.95%	$ 3,207,021	$ 10,459	0.66%
Investment securities: (2)						
Available-for-sale securities:						
Taxable	10,396,533	94,582	1.83	12,471,237	93,978	1.52
Held-to-maturity securities:						
Taxable	13,196,969	167,045	2.55	8,731,526	91,347	2.11
Non-taxable (3)	981,458	16,149	3.32	134,226	2,355	3.54
Total loans, net of unearned income (4) (5)	24,335,762	627,371	5.20	20,290,141	477,538	4.75
Total interest-earning assets	51,440,106	917,090	3.60	44,834,151	675,677	3.04
Cash and due from banks	467,954			355,790		
Allowance for loan losses	(271,931)			(242,264)		
Other assets (6)	1,763,487			1,483,733		
Total assets	$ 53,399,616			$ 46,431,410		
Funding sources:						
Interest-bearing liabilities:						
Interest bearing checking and savings accounts	$ 581,399	$ 222	0.08%	$ 409,579	$ 156	0.08%
Money market deposits	6,301,677	9,876	0.32	5,608,069	3,465	0.12
Money market deposits in foreign offices	200,922	39	0.04	180,934	38	0.04
Time deposits	51,919	36	0.14	50,576	32	0.13
Sweep deposits in foreign offices	1,020,487	194	0.04	1,130,906	223	0.04
Total interest-bearing deposits	8,156,404	10,367	0.26	7,380,064	3,914	0.11
Short-term borrowings	116,605	1,014	1.75	34,902	131	0.76
3.50% Senior Notes	347,373	6,291	3.65	347,047	6,285	3.65
5.375% Senior Notes	348,321	9,721	5.63	347,711	9,704	5.63
Junior Subordinated Debentures	—	—	—	54,456	1,663	6.16
6.05% Subordinated Notes	—	—	—	38,673	467	2.44
Total interest-bearing liabilities	8,968,703	27,393	0.62	8,202,853	22,164	0.54
Portion of noninterest-bearing funding sources	42,471,403			36,631,298		
Total funding sources	51,440,106	27,393	0.11	44,834,151	22,164	0.10
Noninterest-bearing funding sources:						
Demand deposits	38,887,766			33,674,549		
Other liabilities	930,193			614,961		
SVBFG stockholders' equity	4,473,729			3,803,902		
Noncontrolling interests	139,225			135,145		
Portion used to fund interest-earning assets	(42,471,403)			(36,631,298)		
Total liabilities, noncontrolling interest, and SVBFG stockholders' equity	$ 53,399,616			$ 46,431,410		
Net interest income and margin		$ 889,697	3.49%		$ 653,513	2.94%
Total deposits	$ 47,044,170			$ 41,054,613		
Reconciliation to reported net interest income:						
Adjustments for taxable equivalent basis		(3,391)			(824)	
Net interest income, as reported		$ 886,306			$ 652,689	

(1) Includes average interest-earning deposits in other financial institutions of $1.1 billion and $0.9 billion for the six months ended June 30, 2018, and 2017, respectively. The balance also includes $1.3 billion and $2.2 billion deposited at the FRB, earning interest at the Federal Funds target rate for the six months ended June 30, 2018, and 2017, 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 income tax rate of 21.0 percent for the six months ended June 30, 2018, and 35.0 percent for the six months ended June 30, 2017.
(4) Nonaccrual loans are reflected in the average balances of loans.
(5) Interest income includes loan fees of $68 million and $60 million for the six months ended June 30, 2018, and 2017, respectively.
(6) Average investment securities of $780 million and $661 million for the six months ended June 30, 2018, and 2017, 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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands, except ratios)	**2018**	**2017**	**2018**	**2017**
Allowance for loan losses, beginning balance	$ 274,294	$ 243,130	$ 255,024	$ 225,366
Provision for loan losses	27,656	15,185	54,652	44,864
Gross loan charge-offs	(15,428)	(25,081)	(26,015)	(39,111)
Loan recoveries	1,926	2,535	3,714	4,327
Foreign currency translation adjustments	(1,739)	727	(666)	1,050
Allowance for loan losses, ending balance	$ 286,709	$ 236,496	$ 286,709	$ 236,496
Allowance for unfunded credit commitments, beginning balance	$ 52,823	$ 46,335	$ 51,770	$ 45,265
Provision for unfunded credit commitments	1,424	621	2,400	1,676
Foreign currency translation adjustments	(143)	44	(66)	59
Allowance for unfunded credit commitments, ending balance (1)	$ 54,104	$ 47,000	$ 54,104	$ 47,000
Ratios and other information:				
Provision for loan losses as a percentage of period-end total gross loans (annualized)	0.42%	0.29%	0.42%	0.43%
Gross loan charge-offs as a percentage of average total gross loans (annualized)	0.25	0.49	0.21	0.39
Net loan charge-offs as a percentage of average total gross loans (annualized)	0.22	0.44	0.18	0.34
Allowance for loan losses as a percentage of period-end total gross loans	1.10	1.12	1.10	1.12
Provision for credit losses	$ 29,080	$ 15,806	$ 57,052	$ 46,540
Period-end total gross loans	26,160,782	21,103,946	26,160,782	21,103,946
Average total gross loans	25,014,587	20,632,237	24,488,608	20,412,123

(1) The “allowance for unfunded credit commitments” is included as a component of “other liabilities.”

Three months ended June 30, 2018 and 2017

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. Our provision for credit losses was $15.8 million for the three months ended June 30, 2017, consisting of a provision for loan losses of $15.2 million and a provision for unfunded credit commitments of $0.6 million.

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, 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 was primarily driven by increased reserves of $4.5 million from growth in unfunded credit commitment balances of $1.6 billion, offset by a decrease in reserves of $3.5 million reflective of the methodology enhancements mentioned above.

The provision for loan losses of $15.2 million for the three months ended June 30, 2017 primarily reflects $12.7 million in net new specific reserves for nonaccrual loans and a $5.0 million increase in reserves for period-end loan growth, partially offset by a benefit from improved credit quality and the continued shift in our loan portfolio to private equity/venture capital loans, which tend to be of higher credit quality.

The provision for unfunded credit commitments of $0.6 million for three months ended June 30, 2017 was driven primarily by an increase of $0.7 billion in unfunded credit commitment balances.

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.

Gross loan charge-offs were $25.1 million for the three months ended June 30, 2017, of which $5.5 million was not specifically reserved for in prior quarters. Gross loan charge-offs included two Corporate Finance client loans in our software/internet loan portfolio totaling $13.0 million and $11.7 million from early-stage clients, primarily from our software/internet and life science/healthcare loan portfolios.

Six months ended June 30, 2018 and 2017

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. Our provision for credit losses was $46.5 million for the six months ended June 30, 2017, consisting of a provision for loan losses of $44.9 million and a provision for unfunded credit commitments of $1.7 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 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 loan losses of $44.9 million for the six months ended June 30, 2017 was reflective primarily of $38.1 million in net new specific reserves for nonaccrual loans and $10.0 million from period-end loan growth, partially offset by a benefit from improved credit quality and the continued shift in our loan portfolio to private equity/venture capital loans, which tend to be of higher credit quality.

The provision for unfunded credit commitments of $2.4 million for six months ended June 30, 2018 was driven primarily by increased reserves of $4.5 million from growth in unfunded credit commitment balances, offset by a decrease in reserves reflective of the methodology enhancements mentioned above. Our provision for unfunded credit commitments was $1.7 million for the six months ended June 30, 2017.

Gross loan charge-offs were $26.0 million for the six months ended June 30, 2018, of which $14.8 million was not specifically reserved for in prior quarters. Gross loan charge-offs 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. Gross loan charge-offs of $39.1 million for the six months ended June 30, 2017, included $24.1 million from our early-stage portfolio and $13.0 million from two late-stage loans. These charge-offs were primarily from our software/internet loan portfolio.

See “Consolidated Financial Condition—Credit Quality and Allowance for Loan Losses” below and Note 7—“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, 2018, noninterest income was $192.7 million and $348.2 million, respectively, compared to $128.5 million and $246.2 million for the comparable 2017 periods. For the three and six months ended June 30, 2018, non-GAAP noninterest income, net of noncontrolling interests was $183.2 million and $325.7 million, respectively, compared to $119.0 million and $230.1 million for the comparable 2017 periods. For the three and six months ended June 30, 2018, non-GAAP core fee income was $123.1 million and $238.1 million, respectively, compared to $87.3 million and $169.8

million for the comparable 2017 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 noninterest income, 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, 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, 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 foreign exchange fees, credit card fees, deposit service charges, lending related fees, client investment fees and letters of credit and standby letters of credit fees.

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, 2018 and 2017:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
GAAP noninterest income	$ 192,689	$ 128,528	49.9 %	$ 348,207	$ 246,187	41.4%
Less: income attributable to noncontrolling interests, including carried interest allocation	9,445	9,536	(1.0)	22,469	16,095	39.6
Non-GAAP noninterest income, net of noncontrolling interests	$ 183,244	$ 118,992	54.0	$ 325,738	$ 230,092	41.6

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, 2018 and 2017:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
GAAP noninterest income	$ 192,689	$ 128,528	49.9%	$ 348,207	$ 246,187	41.4%
Less: gains on investment securities, net	36,114	17,630	104.8	45,172	33,600	34.4
Less: gains on equity warrant assets, net	19,061	10,820	76.2	38,252	17,510	118.5
Less: other noninterest income	14,390	12,811	12.3	26,649	25,232	5.6
Non-GAAP core fee income (1)	$ 123,124	$ 87,267	41.1	$ 238,134	$ 169,845	40.2

(1) 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 and includes foreign exchange fees, credit card fees, deposit service charges, lending related fees, client investment fees and letters of credit and standby letters of credit fees.

Gains on Investment Securities, Net

Net gains and losses 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 investments in 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 (i.e. lock-up agreements), changes in prevailing market prices, market conditions, the actual sales or distributions of securities, 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, 2018 and 2017

For the three months ended June 30, 2018, we had net gains on investment securities of $36.1 million, compared to $17.6 million for the comparable 2017 period. Non-GAAP net gains on investment securities, net of noncontrolling interests, were $26.4 million for the three months ended June 30, 2018, compared to $8.2 million for the comparable 2017 period.

Non-GAAP net gains on investment securities, net of noncontrolling interests, of $26.4 million for the three months ended June 30, 2018 were driven by the following:

- Gains of $18.1 million from our strategic and other investments portfolio, comprised primarily of net unrealized valuation increases in both private and public company investments held in our strategic venture capital funds, and
- Gains of $7.7 million from our managed funds of funds portfolio, related primarily to net unrealized valuation increases in the public company investments held by the funds in this portfolio.

Six months ended June 30, 2018 and 2017

For the six months ended June 30, 2018, we had net gains on investment securities of $45.2 million, compared to $33.6 million for the comparable 2017 period. Non-GAAP net gains on investment securities, net of noncontrolling interests, were $22.6 million for the six months ended June 30, 2018, compared to $17.7 million for the comparable 2017 period.

Non-GAAP net gains, net of noncontrolling interests, of $22.6 million for the six months ended June 30, 2018 were driven primarily by the following:

- Gains of $30.8 million from our strategic and other investments portfolio, attributable primarily to net unrealized valuation increases in both private and public company investments held in our strategic venture capital funds,
- Losses of $22.1 million from our public equity securities portfolio primarily reflective of net losses on sales of shares of Roku, Inc. ("Roku"), from exercised warrants in 2017, which were sold in the first quarter of 2018, and
- Gains of $14.6 million from our managed funds of funds portfolio, related primarily to net unrealized valuation increases in the public company investments held by the funds in the portfolio.

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, 2018 and 2017:

(Dollars in thousands)	Managed Funds of Funds	Managed Direct Venture Funds	Public Equity Securities (1)	Debt Funds	Sales of AFS Securities (1)	Strategic and Other Investments	Total
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, 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

(1) Effective January 1, 2018, we adopted Accounting Standard update ("ASU") 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, resulting in the reclassification of public equit securities out of our AFS securities portfolio into our non-marketable and other equity securities portfolio. This guidance was adopted using the modified retrospective method with a cumulative adjustment t opening retained earnings. As such, prior period amounts have not been restated.

(Dollars in thousands)	Managed Funds of Funds	Managed Direct Venture Funds	Debt Funds	Sales of AFS Securities	Strategic and Other Investments	Total
Three months ended June 30, 2017						
Total gains (losses) on investment securities, net	$ 12,145	$ 69	$ 682	$ (123)	$ 4,857	$ 17,630
Less: income (loss) attributable to noncontrolling interests, including carried interest allocation	9,490	(25)	—	—	—	9,465
Non-GAAP net gains (losses) on investment securities, net of noncontrolling interests	$ 2,655	$ 94	$ 682	$ (123)	$ 4,857	$ 8,165
Six months ended June 30, 2017						
Total gains on investment securities, net	$ 22,178	$ 165	$ 251	$ 485	$ 10,521	$ 33,600
Less: income attributable to noncontrolling interests, including carried interest allocation	15,910	17	—	—	—	15,927
Non-GAAP net gains on investment securities, net of noncontrolling interests	$ 6,268	$ 148	$ 251	$ 485	$ 10,521	$ 17,673

Gains on Equity Warrant Assets, Net

Three months ended June 30, 2018 and 2017

Net gains on equity warrant assets were $19.1 million for the three months ended June 30, 2018, compared to net gains of $10.8 million for the comparable 2017 period. Net gains on equity warrant assets for the three months ended June 30, 2018 consisted of:

- Net gains of $11.0 million from changes in warrant valuation increases compared to net gains of $8.3 million, driven by our private company warrant portfolio and reflective of increased M&A exit activity and comparable market valuations during the three months ended June 30, 2018, and
- Net gains of $8.9 million from the exercise of equity warrant assets compared to net gains of $3.1 million, primarily driven by increased IPO and M&A activity during the three months ended June 30, 2018.

Six months ended June 30, 2018 and 2017

Net gains on equity warrant assets were $38.3 million for the six months ended June 30, 2018, compared to net gains of $17.5 million for the comparable 2017 period. Net gains on equity warrant assets for the six months ended June 30, 2018 consisted of:

- Net gains of $20.5 million from the exercise of equity warrant assets compared to net gains of $11.3 million , reflective primarily of increased IPO and M&A activity during the six months ended June 30, 2018, and
- Net gains of $19.5 million from changes in warrant valuation increases compared to net gains of $7.3 million, driven by our private company warrant portfolio and reflective of increased M&A activity during the six months ended June 30, 2018.

A summary of gains on equity warrant assets, net, for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Equity warrant assets (1)						
Gains on exercises, net	$ 8,875	$ 3,121	184.4%	$ 20,509	$ 11,345	80.8%
Cancellations and expirations	(826)	(571)	44.7	(1,726)	(1,129)	52.9
Changes in fair value, net	11,012	8,270	33.2	19,469	7,294	166.9
Gains on equity warrant assets, net	$ 19,061	$ 10,820	76.2	$ 38,252	$ 17,510	118.5

(1) At June 30, 2018, we held warrants in 1,967 companies, compared to 1,808 companies at June 30, 2017. The total fair value of our warrant portfolio was $143.7 million at June 30, 2018 and $131.8 million at June 30, 2017. 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. Warrants in 15 companies each had fair values greater than $1.0 million and collectively represented $39.4 million, or 30.0 percent, of the fair value of the total warrant portfolio at June 30, 2017.

Non-GAAP Core Fee Income

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Non-GAAP core fee income (1):						
Foreign exchange fees	$ 34,077	$ 26,108	30.5%	$ 67,904	$ 52,355	29.7%
Credit card fees	22,926	18,099	26.7	44,618	35,829	24.5
Deposit service charges	18,794	14,563	29.1	36,493	28,538	27.9
Client investment fees	29,452	12,982	126.9	52,327	22,008	137.8
Lending related fees	9,528	8,509	12.0	20,263	17,470	16.0
Letters of credit and standby letters of credit fees	8,347	7,006	19.1	16,529	13,645	21.1
Total non-GAAP core fee income (1)	$ 123,124	$ 87,267	41.1	$ 238,134	$ 169,845	40.2

(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.

Foreign Exchange Fees

Foreign exchange fees were $34.1 million and $67.9 million for the three and six months ended June 30, 2018, respectively, compared to $26.1 million and $52.4 million for the comparable 2017 periods. The increases in foreign exchange fees were driven primarily by increases in spot contract commissions driven by increased volume of trades for the three and six months ended June 30, 2018 compared to the 2017 periods. The volume of trades for spot contracts increased 35.1 percent and 33.1 percent for the three and six months ended June 30, 2018, respectively, compared to the comparable 2017 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, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Foreign exchange fees by instrument type:						
Spot contract commissions	$ 31,548	$ 23,583	33.8 %	$ 62,750	$ 46,007	36.4 %
Forward contract commissions	2,455	2,470	(0.6)	4,940	6,071	(18.6)
Option premium fees	74	55	34.5	214	277	(22.7)
Total foreign exchange fees	$ 34,077	$ 26,108	30.5	$ 67,904	$ 52,355	29.7

Credit Card Fees

Credit card fees were $22.9 million and $44.6 million for the three and six months ended June 30, 2018, respectively, compared to $18.1 million and $35.8 million for the comparable 2017 periods. The increases were primarily due to higher net interchange fee income driven by an increase in transaction volume reflective of higher spend by our commercial clients and our focus on our credit card business as a key area targeted for growth. The increases in gross interchange fee income were partially offset by increases in rebate/rewards expense for the three and six months ended June 30, 2018. A summary of credit card fees by instrument type for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Credit card fees by instrument type:						
Card interchange fees, net	$ 18,137	$ 14,033	29.2%	$ 35,697	$ 28,003	27.5%
Merchant service fees	3,425	2,883	18.8	6,331	5,623	12.6
Card service fees	1,364	1,183	15.3	2,590	2,203	17.6
Total credit card fees	$ 22,926	$ 18,099	26.7	$ 44,618	$ 35,829	24.5

Deposit Service Charges

Deposit service charges were $18.8 million and $36.5 million for the three and six months ended June 30, 2018, respectively, compared to $14.6 million and $28.5 million for the comparable 2017 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, 2018.

Client Investment Fees

Client investment fees were $29.5 million and $52.3 million for the three and six months ended June 30, 2018, respectively, compared to $13.0 million and $22.0 million for the comparable 2017 periods. The increases were reflective of the large increase 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 and the reintroduction of fees that had been previously waived due to the low rate environment. A summary of client investment fees by instrument type for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Client investment fees by type:						
Sweep money market fees	$ 17,178	$ 6,474	165.3%	$ 29,500	$ 10,870	171.4%
Asset management fees	5,730	4,111	39.4	11,088	7,490	48.0
Repurchase agreement fees	6,544	2,397	173.0	11,739	3,648	NM
Total client investment fees	$ 29,452	$ 12,982	126.9	$ 52,327	$ 22,008	137.8

NM—Not meaningful

The following table summarizes average client investment funds for the three and six months ended June 30, 2018 and 2017:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in millions)	2018	2017	% Change	2018	2017	% Change
Sweep money market funds	$ 30,164	$ 18,464	63.4%	$ 28,148	$ 18,091	55.6%
Client investment assets under management(1)	33,443	24,423	36.9	32,071	23,735	35.1
Repurchase agreements	7,705	6,223	23.8	7,626	5,794	31.6
Total average client investment funds (2)	$ 71,312	$ 49,110	45.2	$ 67,845	$ 47,620	42.5

(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, 2018 and December 31, 2017:

(Dollars in millions)	June 30, 2018	December 31, 2017	% Change
Sweep money market funds	$ 31,859	$ 23,911	33.2%
Client investment assets under management (1)	35,509	29,344	21.0
Repurchase agreements	8,406	7,074	18.8
Total period-end client investment funds (2)	$ 75,774	$ 60,329	25.6

(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.

Noninterest Expense

A summary of noninterest expense for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Compensation and benefits	$ 181,955	$ 148,973	22.1 %	$ 347,761	$ 296,149	17.4 %
Professional services	46,813	27,925	67.6	75,538	53,344	41.6
Premises and equipment	19,173	18,958	1.1	37,718	34,816	8.3
Net occupancy	13,288	11,126	19.4	26,904	22,777	18.1
Business development and travel	12,095	11,389	6.2	23,286	20,584	13.1
FDIC and state assessments	10,326	9,313	10.9	19,756	17,995	9.8
Correspondent bank fees	3,277	3,163	3.6	6,687	6,608	1.2
Other	18,812	20,399	(7.8)	33,506	36,606	(8.5)
Total noninterest expense	$ 305,739	$ 251,246	21.7	$ 571,156	$ 488,879	16.8

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 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 operating efficiency ratio, which excludes noncontrolling interests. 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 operating efficiency ratio, both net of noncontrolling interests for the three and six months ended June 30, 2018 and 2017:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands, except ratios)	2018	2017	% Change	2018	2017	% Change
GAAP noninterest expense	$ 305,739	$ 251,246	21.7 %	$ 571,156	$ 488,879	16.8 %
Less: amounts attributable to noncontrolling interests	227	223	1.8	195	392	(50.3)
Non-GAAP noninterest expense, net of noncontrolling interests	$ 305,512	$ 251,023	21.7	$ 570,961	$ 488,487	16.9
GAAP net interest income	$ 466,443	$ 342,696	36.1	$ 886,306	$ 652,689	35.8
Adjustments for taxable equivalent basis	2,037	476	NM	3,391	824	NM
Non-GAAP taxable equivalent net interest income	$ 468,480	$ 343,172	36.5	$ 889,697	$ 653,513	36.1
Less: income attributable to noncontrolling interests	10	10	—	19	17	11.8
Non-GAAP taxable equivalent net interest income, net of noncontrolling interests	$ 468,470	$ 343,162	36.5	$ 889,678	$ 653,496	36.1
GAAP noninterest income	$ 192,689	$ 128,528	49.9	$ 348,207	$ 246,187	41.4
Less: income attributable to noncontrolling interests	9,445	9,536	(1.0)	22,469	16,095	39.6
Non-GAAP noninterest income, net of noncontrolling interests	$ 183,244	$ 118,992	54.0	$ 325,738	$ 230,092	41.6
GAAP total revenue	$ 659,132	$ 471,224	39.9	$ 1,234,513	$ 898,876	37.3
Non-GAAP taxable equivalent revenue, net of noncontrolling interests	$ 651,714	$ 462,154	41.0	$ 1,215,416	$ 883,588	37.6
GAAP operating efficiency ratio	46.39%	53.32%	(13.0)	46.27%	54.39%	(14.9)
Non-GAAP operating efficiency ratio (1)	46.88	54.32	(13.7)	46.98	55.28	(15.0)

NM—Not meaningful

(1) The non-GAAP operating efficiency ratio is calculated by dividing non-GAAP noninterest expense, net of noncontrolling interests, by non-GAAP taxable-equivalent revenue, net of noncontrolling interests.

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, 2018 and 2017:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands, except employees)	2018	2017	% Change	2018	2017	% Change
Compensation and benefits:						
Salaries and wages	$ 76,831	$ 68,029	12.9%	$ 149,870	$ 134,888	11.1%
Incentive compensation & ESOP	54,382	36,824	47.7	98,015	70,642	38.7
Other employee incentives and benefits (1)	50,742	44,120	15.0	99,876	90,619	10.2
Total compensation and benefits	$ 181,955	$ 148,973	22.1	$ 347,761	$ 296,149	17.4
Period-end full-time equivalent employees	2,626	2,380	10.3	2,626	2,380	10.3
Average full-time equivalent employees	2,591	2,372	9.2	2,545	2,358	7.9

(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 $182.0 million for the three months ended June 30, 2018, compared to $149.0 million for the comparable 2017 period. The key changes in factors affecting compensation and benefits expense were as follows:

- An increase of $17.6 million in incentive compensation and ESOP expense reflective primarily of our strong 2018 full-year expected performance as compared to 2017 as well as an increase in the number of average FTE since June 30, 2017,
- An increase of $8.8 million in salaries and wages reflective primarily of the increase in the number of average FTE by 219 to 2,591 for the second quarter of 2018 compared to the same period in 2017, as well as merit increases, and
- An increase of $6.6 million in other employee incentives and benefits primarily driven by an increase in employer payroll taxes of $2.7 million, reflective of the increase in the number of average FTE since the second quarter of 2017, as well as an increase of $2.1 million in share-based compensation expense, primarily due to our accruals based on our performance expectations for our outstanding performance-based restricted stock awards compared to our estimate for the second quarter of 2017, reflective of the increase in our stock price relative to our peers.

Compensation and benefits expense was $347.8 million for the six months ended June 30, 2018, compared to $296.1 million for the comparable 2017 period. The key changes in factors affecting compensation and benefits expense were as follows:

- An increase of $27.4 million in incentive compensation and ESOP expense reflective primarily of our strong 2018 full-year expected performance as compared to 2017 as well as an increase in the number of average FTE since June 30, 2017,
- An increase of $15.0 million in salaries and wages reflective primarily of the increase in the number of average FTE by 187 to 2,545 for the second half of 2018 compared to the same period in 2017, as well as merit increases, and
- An increase of $9.3 million in other employee incentives and benefits primarily driven by an increase in employer payroll taxes of $3.9 million, reflective of the increase in the number of average FTE since the second half of 2017, as well as an increase of $3.4 million in share-based compensation expense, primarily due to our accruals based on our performance expectations for our outstanding performance-based restricted stock awards compared to our estimate for the second half of 2017, reflective of the increase in our stock price relative to our peers.

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 2017 Form 10-K). Total costs incurred under these plans were $61.8 million and $115.0 million for the three and six months ended June 30, 2018, respectively, compared to $43.1 million and $87.4 million for the comparable 2017 periods. These amounts are included in total compensation and benefits expense discussed above.

Professional Services

Professional services expense was $46.8 million and $75.5 million for the three and six months ended June 30, 2018, respectively, compared to $27.9 million and $53.3 million for the comparable 2017 periods. The increases were primarily related to enhancements in our regulatory, risk and compliance infrastructure to support our momentum as we continue to grow both domestically and globally as well as investments made in projects, systems and technology to support our revenue growth and related initiatives and other operating costs. Professional services expense for the three and six months ended June 30, 2018, included a $6.0 million write-off for capitalized costs in connection with the Economic Growth, Regulatory Relief and Consumer Protection Act, which includes regulatory reform of the threshold for which certain enhanced prudential standards apply from $50 billion to $250 billion.

Net Occupancy

Net occupancy expense was $13.3 million and $26.9 million for the three and six months ended June 30, 2018, respectively, compared to $11.1 million and $22.8 million for the comparable 2017 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.

Business Development and Travel

Business development and travel expense was $12.1 million and $23.3 million for the three and six months ended June 30, 2018, respectively, compared to $11.4 million and $20.6 million for the comparable 2017 period. The increases were to support expansion initiatives as we continue to grow both domestically and globally.

Other Noninterest Expense

Total other noninterest expense was $18.8 million and $33.5 million for the three and six months ended June 30, 2018, respectively, compared to $20.4 million and $36.6 million for the comparable 2017 periods. The decreases were driven primarily by certain reimbursement incentives received associated with a new vendor agreement signed during the first quarter 2018.

A summary of other noninterest expense for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Lending and other client related processing costs	$ 7,403	$ 6,332	16.9 %	$ 10,603	$ 11,871	(10.7)%
Data processing services	2,703	2,428	11.3	5,195	5,010	3.7
Telephone	2,378	2,671	(11.0)	4,756	5,374	(11.5)
Dues and publications	845	677	24.8	1,694	1,472	15.1
Postage and supplies	813	652	24.7	1,480	1,401	5.6
Other	4,670	7,639	(38.9)	9,778	11,478	(14.8)
Total other noninterest expense	$ 18,812	$ 20,399	(7.8)	$ 33,506	$ 36,606	(8.5)

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 funds' general partners. A summary of net income attributable to noncontrolling interests for the three and six months ended June 30, 2018 and 2017 is as follows:

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Net interest income (1)	$ (10)	$ (10)	— %	$ (19)	$ (17)	11.8 %
Noninterest income (1)	(7,856)	(9,264)	(15.2)	(17,378)	(14,718)	18.1
Noninterest expense (1)	227	223	1.8	195	392	(50.3)
Carried interest allocation (2)	(1,589)	(272)	NM	(5,091)	(1,377)	NM
Net income attributable to noncontrolling interests	$ (9,228)	$ (9,323)	(1.0)	$ (22,293)	$ (15,720)	41.8

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, 2018 and 2017

Net income attributable to noncontrolling interests was $9.2 million for the three months ended June 30, 2018, compared to $9.3 million for the comparable 2017 period. Net income attributable to noncontrolling interests of $9.2 million for the three months ended June 30, 2018 was primarily a result of $9.4 million net gains on investment securities (including carried interest allocation) from our managed funds of funds portfolio related to net unrealized valuation increases in the investments held by the funds during the second quarter of 2018. See "Results of Operations—Noninterest Income—Gains on Investment Securities, Net".

Six months ended June 30, 2018 and 2017

Net income attributable to noncontrolling interests was $22.3 million for the six months ended June 30, 2018, compared to $15.7 million for the comparable 2017 period. Net income attributable to noncontrolling interests of $22.3 million for the six months ended June 30, 2018 was primarily a result of $22.5 million net gains on investment securities (including carried interest allocation) from our managed funds of funds portfolio due to net unrealized valuation increases of investments held by the funds. See "Results of Operations—Noninterest Income—Gains on Investment Securities, Net".

Income Taxes

On December 22, 2017, the TCJ Act was signed into law. The TCJ Act amends the Internal Revenue Code to, among other things, reduce tax rates, and make changes to credits and deductions for individuals and businesses. For businesses, the TCJ Act permanently lowers the Federal corporate tax rate to 21.0 percent from the prior maximum rate of 35.0 percent, effective for tax years including or commencing January 1, 2018.

The Company has also considered the provisions of the TCJ Act related to non-U.S. operations which would potentially impact the Company's income tax provision. Such provisions include the one-time transition tax ("TT") on foreign earnings and the new base erosion anti-avoidance tax ("BEAT"). Based on analyses performed by the Company as of June 30, 2018, the impact of both of these provisions continue to have an immaterial impact on the Company's income tax provision.

Our effective income tax expense rate was 24.5 percent and 25.9 percent for the three and six months ended June 30, 2018, respectively, compared to 36.8 percent and 35.4 percent for the comparable 2017 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 reductions in the effective tax rate for the three and six months ended June 30, 2018 were primarily due to the lower Federal corporate tax rate as a result of the TCJ Act effective January 1, 2018, partially offset by the period-over-period reduction in tax benefits associated with employee stock transactions as a result of the reduction in the Federal statutory rate and a one-time benefit of $4.7 million recorded in the period ended March 31, 2017, for the return of tax funds related to a prior year's tax return.

The effective tax rate for the three months ended June 30, 2018, and 2017, included the recognition of tax benefits of $12.0 million and $7.0 million, respectively, due to the adoption and implementation of ASU 2016-09 in the first quarter of 2017. The effective tax rate for the six months ended June 30, 2018, and 2017, included the recognition of tax benefits of $14.5 million and $13.1 million, respectively.

The Company has considered the provisions of the TCJ Act and analyzed for potential impact to its income tax provision for the fiscal year ending December 31, 2018. Aside from the items noted above, the Company is not aware of any further items which could materially impact its financial statements for the three and six months ended June 30, 2018.

Operating Segment Results

We have three segments for which we report our financial information: Global Commercial Bank, SVB Private Bank and SVB Capital.

We report segment information based on the "management" approach, which designates the internal reporting used by management for making decisions and assessing performance as the source of our reporting segments. Please refer to Note 12—"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, 2018 and 2017:

Global Commercial Bank

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Net interest income	$ 409,057	$ 311,051	31.5%	$ 778,924	$ 586,929	32.7%
Provision for credit losses	(27,356)	(14,856)	84.1	(52,630)	(43,745)	20.3
Noninterest income	113,245	83,904	35.0	212,591	163,423	30.1
Noninterest expense	(197,695)	(176,702)	11.9	(382,261)	(349,548)	9.4
Income before income tax expense	$ 297,251	$ 203,397	46.1	$ 556,624	$ 357,059	55.9
Total average loans, net of unearned income	$ 21,714,870	$ 17,907,635	21.3	$ 21,199,897	$ 17,778,065	19.2
Total average assets	52,540,865	45,478,211	15.5	51,252,398	44,188,162	16.0
Total average deposits	45,991,701	40,477,823	13.6	45,022,054	39,393,219	14.3

Three months ended June 30, 2018 and 2017

Income before income tax expense from our Global Commercial Bank ("GCB") increased to $297.3 million for the three months ended June 30, 2018, compared to $203.4 million for the comparable 2017 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, 2018 compared to the comparable 2017 period are discussed below.

Net interest income from GCB increased by $98.0 million for the three months ended June 30, 2018, 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 $27.4 million for the three months ended June 30, 2018, compared to $14.9 million for the comparable 2017 period. The provision of $27.4 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, 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 of $14.9 million for the three months ended June 30, 2017 primarily reflected $12.7 million in net new specific reserves for nonaccrual loans and a $5.0 million increase in reserves for period-end loan growth, partially offset by a benefit from improved credit quality from the continued shift in our loan portfolio to private equity/venture capital loans, which tend to be of higher credit quality.

Noninterest income increased by $29.3 million for the three months ended June 30, 2018, related primarily to an overall increase in our non-GAAP core fee income (higher foreign exchange fees, client investment fees and credit card fees). 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 $21.0 million for the three months ended June 30, 2018, due primarily to increased compensation and benefits and professional services expenses. Compensation and benefits expense increased by $20.3 million primarily as a result of increased incentive compensation and ESOP expense, salaries and wages and other employee benefits. The increase in incentive compensation and ESOP expense is reflective primarily of our strong 2018 full-year expected performance as compared to 2017 as well as an increase in FTE. The increase in GCB salaries and wages was due primarily to an increase in the average number of FTEs at GCB, which increased by 131 to 1,977 FTEs for the three months ended June 30, 2018, compared to 1,846 FTEs for the comparable 2017 period. The increase in total other employee benefits was related to various expenses, particularly employer payroll taxes reflective of the increase in the number of average FTE since the second quarter of 2017 and increased share-based compensation expense associated primarily with our performance-based restricted stock unit awards.

Six months ended June 30, 2018 and 2017

Net interest income from our GCB increased by $192.0 million for the six months ended June 30, 2018, 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 $52.6 million for the six months ended June 30, 2018, compared to a provision of $43.7 million for the comparable 2017 period. 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, 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 of $43.7 million for the six months ended June 30, 2017 was reflective primarily of $38.1 million in net new specific reserves for nonaccrual loans and $10.0 million from period-end loan growth, partially offset by a benefit from improved credit quality and the continued shift in our loan portfolio to private equity/venture capital loans, which tend to be of higher credit quality.

Noninterest income increased by $49.2 million for the six months ended June 30, 2018, related primarily to an overall increase in our non-GAAP core fee income (higher foreign exchange fees, credit card fees and client investment fees). 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 $32.7 million for the six months ended June 30, 2018, due primarily to increased expenses for compensation and benefits and professional services expenses. Compensation and benefits expense increased by $33.5 million primarily as a result of increased incentive compensation and ESOP expense, salaries and wages and other employee benefits. The increase in incentive compensation and ESOP expense is reflective primarily of our strong 2018 full-year expected performance as compared to 2017 as well as an increase in FTE. The increase in GCB salaries and wages was due primarily to an increase in the average number of FTEs at GCB, which increased by 106 to 1,950 FTEs for the six months ended June 30, 2018, compared to 1,844 FTEs for the comparable 2017 period. The increase in total other employee benefits was related to various expenses, particularly employer payroll taxes reflective of the increase in the number of average FTE since the second half of 2017 and increased share-based compensation expense associated primarily with our performance-based restricted stock unit awards.

SVB Private Bank

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Net interest income	$ 15,645	$ 14,742	6.1 %	$ 31,892	$ 28,352	12.5 %
Provision for credit losses	(300)	(329)	(8.8)	(2,022)	(1,119)	80.7
Noninterest income	564	536	5.2	1,072	1,254	(14.5)
Noninterest expense	(5,927)	(4,050)	46.3	(11,969)	(7,968)	50.2
Income before income tax expense	$ 9,982	$ 10,899	(8.4)	$ 18,973	$ 20,519	(7.5)
Total average loans, net of unearned income	$ 2,777,617	$ 2,365,464	17.4	$ 2,722,444	$ 2,305,723	18.1
Total average assets	2,515,984	2,397,188	5.0	2,553,024	2,335,350	9.3
Total average deposits	1,480,162	1,302,890	13.6	1,526,038	1,319,776	15.6

Three months ended June 30, 2018 and 2017

Net interest income from our SVB Private Bank increased by $0.9 million for the three months ended June 30, 2018, due primarily to higher interest income due to loan growth, partially offset by a higher funding charge for loans funded.

Noninterest expense increased by $1.9 million for the three months ended June 30, 2018, 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 2017, and higher incentive compensation expenses, reflective primarily of our strong 2018 full-year expected performance as compared to 2017.

Six months ended June 30, 2018 and 2017

Net interest income from our SVB Private Bank increased by $3.5 million for the six months ended June 30, 2018, due primarily to higher interest income due to loan growth, partially offset by a higher funding charge for loans funded.

SVB Private Bank had a provision for credit losses of $2.0 million for the six months ended June 30, 2018, compared to $1.1 million for the comparable 2017 period. The provisions for both the six months ended June 30, 2018 and 2017 were due primarily to reserves for period-end loan growth.

Noninterest expense increased by $4.0 million for the six months ended June 30, 2018, 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 the second half of 2017, and higher incentive compensation expenses, reflective primarily of our strong 2018 full-year expected performance as compared to 2017.

SVB Capital

	Three months ended June 30,			Six months ended June 30,		
(Dollars in thousands)	2018	2017	% Change	2018	2017	% Change
Net interest income	$ 9	$ 16	(43.8)%	$ 16	$ 16	—%
Noninterest income	28,498	15,019	89.7	57,409	31,794	80.6
Noninterest expense	(5,666)	(6,192)	(8.5)	(10,713)	(9,664)	10.9
Income before income tax expense	$ 22,841	$ 8,843	158.3	$ 46,712	$ 22,146	110.9
Total average assets	$ 369,841	$ 355,292	4.1	$ 371,572	$ 364,036	2.1

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 and average assets 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, 2018 and 2017

SVB Capital had noninterest income of $28.5 million for the three months ended June 30, 2018, compared to $15.0 million for the comparable 2017 period. The increase in noninterest income was due primarily to higher net gains on investment securities compared to the comparable 2017 period. SVB Capital's components of noninterest income primarily include the following:

- Net gains on investment securities of $20.9 million for the three months ended June 30, 2018, compared to net gains of $9.1 million for the comparable 2017 period. The increase in net gains on investment securities for the three months ended June 30, 2018, was related primarily to gains from our strategic venture capital fund investments reflective of gains from net unrealized valuation increases in public company investments held in our strategic venture capital funds and net unrealized valuation increases in the public company investments held by our managed funds of funds, and
- Fund management fees of $5.9 million compared to $5.5 million for the comparable 2017 period.

Six months ended June 30, 2018 and 2017

SVB Capital had noninterest income of $57.4 million for the six months ended June 30, 2018, compared to $31.8 million for the comparable 2017 period. The increase in noninterest income was due primarily to higher net gains on investment securities compared to the comparable 2017 period. SVB Capital's components of noninterest income primarily include the following:

- Net gains on investment securities of $43.8 million for the six months ended June 30, 2018, compared to net gains of $19.9 million for the comparable 2017 period. The net gains on investment securities of $43.8 million were related to gains from our strategic venture capital fund investments reflective of net unrealized valuation increases in both public and private company investments held in our strategic venture capital funds and gains from net unrealized valuation increases in public company investments held by our managed funds of funds, offset by losses from our public equity securities portfolio reflective of net losses on sales of shares of Roku, from exercised warrants in 2017, which were sold in the first quarter of 2018, and
- Fund management fees of $11.7 million compared to $10.7 million for the comparable 2017 period.

Consolidated Financial Condition

Our total assets, and total liabilities and stockholders' equity, were $55.9 billion at June 30, 2018 compared to $51.2 billion at December 31, 2017, an increase of $4.7 billion, or 9.1 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 $2.7 billion at June 30, 2018, a decrease of $0.2 billion, or 7.2 percent, compared to $2.9 billion at December 31, 2017.

As of June 30, 2018, $0.6 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 $1.0 billion. As of December 31, 2017, $0.6 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 $1.1 billion.

Investment Securities

Investment securities totaled $26.3 billion at June 30, 2018, an increase of $1.9 billion, or 7.8 percent, compared to $24.4 billion at December 31, 2017. 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 $9.6 billion at June 30, 2018 compared to $11.1 billion at December 31, 2017, a decrease of $1.5 billion, or 13.7 percent. The $1.5 billion decrease in period-end AFS securities balances from December 31, 2017 to June 30, 2018, was due primarily to $1.8 billion in portfolio paydowns and maturities partially offset by purchases of $0.4 billion. 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. During the six months ending June 30, 2018 the AFS portfolio had unrealized losses of $73.1 million ($52.9 million net of tax), primarily driven by increases in period-end market interest rates.

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, 2018. 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 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 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, 2018									
	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	$5,733,070	1.67%	$2,037,522	1.39%	$3,349,925	1.71%	$ 345,623	2.99%	$ —	—%
U.S. agency debentures	1,485,864	1.75	555,737	1.51	930,127	1.89	—	—	—	—
Residential mortgage-backed securities:										
Agency-issued collateralized mortgage obligations—fixed rate	2,038,134	2.59	—	—	—	—	47,098	2.63	1,991,036	2.58
Agency-issued collateralized mortgage obligations—variable rate	336,298	0.71	—	—	—	—	—		336,298	0.71
Total	$9,593,366	1.84	$2,593,259	1.42	$4,280,052	1.75	$ 392,721	2.95	$2,327,334	2.31

Held-to-Maturity Securities

Period-end held-to-maturity securities were $15.9 billion at June 30, 2018 compared to $12.7 billion at December 31, 2017, an increase of $3.2 billion, or 25.5 percent. The $3.2 billion increase in period-end HTM security balances from December 31, 2017 to June 30, 2018 was due to new purchases of $4.1 billion, with $3.3 billion of agency backed mortgage securities purchases and $0.8 billion of municipal bond purchases, partially offset by $0.9 billion in portfolio paydowns and maturities.

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, 2018. 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 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, 2018									
	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	$ 713,809	2.67%	$ —	—%	$ 122,040	2.61%	$ 591,769	2.68%	$ —	—%
Residential mortgage-backed securities:										
Agency-issued mortgage-backed securities	8,588,483	2.87	707	7.52	172,594	2.17	672,564	2.40	7,742,618	2.93
Agency-issued collateralized mortgage obligations—fixed rate	2,494,834	1.78	—	—	—	—	412,530	1.48	2,082,304	1.84
Agency-issued collateralized mortgage obligations—variable rate	233,285	0.74	—	—	—	—	—	—	233,285	0.74
Agency-issued commercial mortgage-backed securities	2,335,971	2.79	—	—	—	—	—	—	2,335,971	2.79
Municipal bonds and notes	1,531,881	3.57	7,257	2.84	75,946	2.14	259,085	2.64	1,189,593	3.87
Total	$15,898,263	2.71	$ 7,964	3.26	$ 370,580	2.31	$1,935,948	2.32	$13,583,771	2.78

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. Our estimated fixed income investment securities portfolio average duration was 3.7 years and 3.0 years at June 30, 2018 and December 31, 2017, 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 investments in 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 securities compared to the amounts attributable to SVBFG.

Period-end non-marketable and other equity securities were $852.5 million at June 30, 2018 compared to $651.1 million at December 31, 2017, an increase of $201.4 million, or 30.9 percent. Non-marketable and other equity securities, net of noncontrolling interests were $722.3 million at June 30, 2018, compared to $530.6 million at December 31, 2017. The increase was mostly attributable to accounting changes related to the adoption of ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which requires equity investments (except those accounted for under the equity method of accounting) to be measured at fair value and eliminated the cost method of accounting. As part of this adoption we recorded an adjustment to opening retained earnings for cost method investments measured at NAV and increased the carrying value of our unconsolidated venture capital and private equity fund investments. We also increased our investments in qualified affordable housing projects by $77.3 million for additional tax benefits as part of our strategy to reduce our effective tax rate. The following table summarizes the carrying value (as reported) of non-marketable and other securities compared to the amounts attributable to SVBFG (which generally represents the carrying value times our ownership percentage) at June 30, 2018 and December 31, 2017:

	June 30, 2018		December 31, 2017	
(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 (fair value accounting):				
Consolidated venture capital and private equity fund investments (1)	$ 133,007	$ 34,331	$ 128,111	$ 33,044
Unconsolidated venture capital and private equity fund investments (2)	211,113	211,113	98,548	98,548
Other investments without a readily determinable fair value (3)	24,015	24,015	27,680	27,680
Other equity securities in public companies (4)	4,412	3,968	310	103
Non-marketable securities (equity method accounting) (5):				
Venture capital and private equity fund investments	102,838	71,742	89,809	64,675
Debt funds	14,215	14,215	21,183	21,183
Other investments	111,426	111,426	111,198	111,198
Investments in qualified affordable housing projects, net	251,479	251,479	174,214	174,214
Total non-marketable and other equity securities	$ 852,505	$ 722,289	$ 651,053	$ 530,645

(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, 2018 and December 31, 2017:

	June 30, 2018		December 31, 2017	
(Dollars in thousands)	Carrying value (as reported)	Amount attributable to SVBFG	Carrying value (as reported)	Amount attributable to SVBFG
Strategic Investors Fund, LP	$ 13,972	$ 1,755	$ 14,673	$ 1,843
Capital Preferred Return Fund, LP	58,148	12,532	54,147	11,670
Growth Partners, LP	59,886	19,937	58,372	19,432
CP I, LP	1,001	107	919	99
Total consolidated venture capital and private equity fund investments	$ 133,007	$ 34,331	$ 128,111	$ 33,044

(2) The carrying value represents investments in 226 and 235 funds (primarily venture capital funds) at June 30, 2018 and December 31, 2017, 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. Effective January 1, 2018, we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which eliminated the concept of cost method accounting. On a prospective basis we will 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 funds. We will 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. We recorded a cumulative adjustment to opening retained earnings on January 1, 2018 for the difference between fair value and cost for these fund investments. The estimated fair value and carrying value of these venture capital and private equity fund investments was $211.1 million as of June 30, 2018. As of December 31, 2017, these investments were carried at cost and had a carrying value of $98.5 million.

(3) Effective January 1, 2018, we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which eliminated the concept of cost method accounting. On a prospective basis we will report our other investments in the line item "Other investments without a readily determinable fair value". 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. For further details on the carrying value of these investments refer to Note 6—"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. Effective January 1, 2018 we adopted ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities which requires equity securities to be measured at fair value with changes in the fair value recognized through net income. Prior to January 1, 2018 we reported equity securities in public companies that we held as a result of exercising public equity warrant assets in available-for-sale securities. On a prospective basis, these equity securities will be reported in non-marketable and other equity securities.

(5) The following table shows the carrying value and amount attributable to SVBFG of each investment at June 30, 2018 and December 31, 2017 (equity method accounting):

(Dollars in thousands)	June 30, 2018		December 31, 2017	
	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	$ 5,003	$ 4,692	$ 6,342	$ 5,971
Strategic Investors Fund III, LP	18,858	15,266	18,758	15,211
Strategic Investors Fund IV, LP	29,152	24,657	25,551	21,739
Strategic Investors Fund V, LP	21,247	11,155	16,856	8,849
CP II, LP (i)	6,792	4,110	6,700	4,056
Other venture capital and private equity fund investments	21,786	11,862	15,602	8,849
Total venture capital and private equity fund investments	$ 102,838	$ 71,742	$ 89,809	$ 64,675
Debt funds:				
Gold Hill Capital 2008, LP (ii)	$ 11,153	$ 11,153	$ 18,690	$ 18,690
Other debt funds	3,062	3,062	2,493	2,493
Total debt funds	$ 14,215	$ 14,215	$ 21,183	$ 21,183
Other investments:				
SPD Silicon Valley Bank Co., Ltd.	$ 75,837	$ 75,837	$ 75,337	$ 75,337
Other investments	35,589	35,589	35,861	35,861
Total other investments	$ 111,426	$ 111,426	$ 111,198	$ 111,198

(i) Our ownership includes direct ownership 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, 2018, such prohibited investments had an estimated aggregate carrying value and fair value of approximately $258 million. (For more information about the Volcker Rule, see "Business—Supervision and Regulation" under Part 1, Item 1 of our 2017 Form 10-K.)

Loans

Loans, net of unearned income increased by $2.9 billion to $26.0 billion at June 30, 2018, compared to $23.1 billion at December 31, 2017. Unearned income was $165 million at June 30, 2018 and $148 million at December 31, 2017. Total gross loans were $26.2 billion at June 30, 2018, an increase of $2.9 billion, compared to $23.3 billion at December 31, 2017. Period-end loans increased compared to December 31, 2017, driven primarily by loan growth in our private equity/venture capital portfolio as well as from our life science/healthcare and private bank loan portfolios.

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

	June 30, 2018		December 31, 2017	
(Dollars in thousands)	Amount	Percentage	Amount	Percentage
Commercial loans:				
Software/internet	$ 6,291,788	24.0%	$ 6,232,725	26.8%
Hardware	1,281,433	4.9	1,200,900	5.2
Private equity/venture capital	12,233,005	46.8	9,961,121	42.8
Life science/healthcare	2,158,336	8.3	1,867,960	8.0
Premium wine	198,809	0.8	204,257	0.9
Other	329,260	1.2	379,431	1.6
Total commercial loans	22,492,631	86.0	19,846,394	85.3
Real estate secured loans:				
Premium wine	686,241	2.6	670,112	2.9
Consumer	2,477,871	9.5	2,297,857	9.9
Other	41,477	0.2	42,230	0.2
Total real estate secured loans	3,205,589	12.3	3,010,199	13.0
Construction loans	65,286	0.2	69,108	0.3
Consumer loans	397,276	1.5	328,452	1.4
Total gross loans	$ 26,160,782	100.0	$ 23,254,153	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, 2018:

	June 30, 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	$ 1,539,475	$ 1,008,935	$ 1,632,610	$ 1,311,264	$ 799,504	$ 6,291,788
Hardware	280,723	156,107	222,416	335,955	286,232	1,281,433
Private equity/venture capital	805,821	979,953	1,720,124	1,395,524	7,331,583	12,233,005
Life science/healthcare	304,936	468,496	579,664	437,771	367,469	2,158,336
Premium wine	66,605	31,382	41,388	59,434	—	198,809
Other	218,862	16,769	58,901	—	34,728	329,260
Commercial loans	3,216,422	2,661,642	4,255,103	3,539,948	8,819,516	22,492,631
Real estate secured loans:						
Premium wine	166,024	183,678	225,818	110,721	—	686,241
Consumer	2,120,801	257,917	99,153	—	—	2,477,871
Other	7,635	—	33,842	—	—	41,477
Real estate secured loans	2,294,460	441,595	358,813	110,721	—	3,205,589
Construction loans	12,257	39,472	13,557	—	—	65,286
Consumer loans	144,545	45,198	50,204	120,974	36,355	397,276
Total gross loans	$ 5,667,684	$ 3,187,907	$ 4,677,677	$ 3,771,643	$ 8,855,871	$ 26,160,782

At June 30, 2018, gross loans equal to or greater than $20 million to any single client (individually or in the aggregate) totaled $12.6 billion, or 48.3 percent of our total gross loan portfolio. These loans represented 318 clients, and of these loans, $28.2 million were on nonaccrual status as of June 30, 2018.

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, 2017:

	December 31, 2017					
(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	$ 1,558,717	$ 974,959	$ 1,545,194	$ 1,190,247	$ 963,608	$ 6,232,725
Hardware	258,586	138,254	253,978	217,425	332,657	1,200,900
Private equity/venture capital	697,427	807,596	1,617,121	1,142,818	5,696,159	9,961,121
Life science/healthcare	321,738	450,445	576,926	313,656	205,195	1,867,960
Premium wine	60,663	37,845	64,062	32,423	9,264	204,257
Other	149,825	23,096	103,989	25,599	76,922	379,431
Commercial loans	3,046,956	2,432,195	4,161,270	2,922,168	7,283,805	19,846,394
Real estate secured loans:						
Premium wine	150,563	187,272	220,062	89,561	22,654	670,112
Consumer loans	1,989,973	224,825	83,059	—	—	2,297,857
Other	7,763	—	14,134	20,333	—	42,230
Real estate secured loans	2,148,299	412,097	317,255	109,894	22,654	3,010,199
Construction loans	12,178	34,029	—	22,901	—	69,108
Consumer loans	146,395	49,921	17,120	78,742	36,274	328,452
Total gross loans	$ 5,353,828	$ 2,928,242	$ 4,495,645	$ 3,133,705	$ 7,342,733	$ 23,254,153

At December 31, 2017, gross loans equal to or greater than $20 million to any single client (individually or in the aggregate) totaled $10.5 billion, or 45.1 percent of our total gross loan portfolio. These loans represented 277 clients, and of these loans, $52.1 million were on nonaccrual status as of December 31, 2017.

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 all 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, 2018 and December 31, 2017. 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 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 includes asset-based loans, represented 9 percent of total gross loans at June 30, 2018 compared to 10 percent at December 31, 2017. 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, both represented two percent of total gross loans as of June 30, 2018, and both represented three percent of total gross loans at December 31, 2017. 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 18 percent of total gross loans at June 30, 2018, compared to 19 percent at December 31, 2017. 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 eight percent of total gross loans at June 30, 2018 compared to nine percent at December 31, 2017. 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. At June 30, 2018, our lending to private equity/venture capital firms and funds represented 47 percent of total gross loans, compared to 43 percent of total gross loans at December 31, 2017. 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, 2018 and December 31, 2017. Many of these clients have mortgages, which represented 86 percent of this portfolio at June 30, 2018; 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 30 percent and 11 percent of our outstanding total gross loan balances as of June 30, 2018 were to borrowers based in California and New York, respectively, compared to 31 percent and 10 percent as of December 31, 2017. Other than California and New York, there are no states with gross loan balances greater than 10 percent.

See generally “Risk Factors–Credit Risks” set forth under Part I, Item 1A in our 2017 Form 10-K.

Credit Quality Indicators

As of June 30, 2018 and December 31, 2017, our total criticized loans and impaired loans both represented four percent of our total gross loans. Criticized and impaired loans to early-stage clients represented 18 percent and 22 percent of our total criticized and impaired loan balances at June 30, 2018 and December 31, 2017, respectively. Loans to early-stage clients represent a relatively small percentage of our overall portfolio at six percent of total gross loans at June 30, 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, 2018	December 31, 2017
Gross nonaccrual, past due, and restructured loans:		
Nonaccrual loans	$ 124,842	$ 119,259
Loans past due 90 days or more still accruing interest	462	191
Total nonperforming loans	125,304	119,450
OREO and other foreclosed assets	—	—
Total nonperforming assets	$ 125,304	$ 119,450
Performing TDRs	$ 42,408	$ 71,468
Nonperforming loans as a percentage of total gross loans	0.48%	0.51%
Nonperforming assets as a percentage of total assets	0.22	0.23
Allowance for loan losses	$ 286,709	$ 255,024
As a percentage of total gross loans	1.10%	1.10%
As a percentage of total gross nonperforming loans	228.81	213.50
Allowance for loan losses for nonaccrual loans	$ 53,677	$ 41,793
As a percentage of total gross loans	0.21%	0.18%
As a percentage of total gross nonperforming loans	42.84	34.99
Allowance for loan losses for total gross performing loans	$ 233,032	$ 213,231
As a percentage of total gross loans	0.89%	0.92%
As a percentage of total gross performing loans	0.90	0.92
Total gross loans	$ 26,160,782	$ 23,254,153
Total gross performing loans	26,035,478	23,134,703
Allowance for unfunded credit commitments (1)	54,104	51,770
As a percentage of total unfunded credit commitments	0.29%	0.30%
Total unfunded credit commitments (2)	$ 18,728,360	$ 17,462,537

(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 remained flat at 1.10 percent at June 30, 2018, compared to December 31, 2017 reflective of a decrease in reserves for performing loans of three basis points, offset by an increase in reserves for nonaccrual loans of three basis points.

Our allowance for loan losses for performing loans was $233.0 million at June 30, 2018, compared to $213.2 million at December 31, 2017. The $19.8 million increase in reserves for performing loans was reflective primarily of an increase in reserves of $26.5 million for period-end loan growth of $2.9 billion, 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.

Our allowance for loan losses for nonaccrual loans was $53.7 million at June 30, 2018, compared to $41.8 million at December 31, 2017. The $11.9 million increase in the allowance for nonaccrual loans included $34.5 million of new nonaccrual loan reserves, offset by $11.0 million of charge-offs and $11.6 million of reserve releases. New nonaccrual loan reserves of $34.5 million were mostly attributable to our software/internet loan portfolio.

The following table presents a summary of changes in nonaccrual loans for the three and six months ended June 30, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Balance, beginning of period	$ 116,667	$ 138,764	$ 119,259	$ 118,979
Additions	28,960	22,015	50,763	56,339
Paydowns	(16,411)	(17,789)	(33,659)	(22,116)
Charge-offs	(4,467)	(22,817)	(11,579)	(33,028)
Other reductions	—	(1)	(35)	(2)
Balance, end of period	$ 124,749	$ 120,172	$ 124,749	$ 120,172

Our nonaccrual loans as of June 30, 2018 included $102.1 million from seven clients (six software/internet clients represent $91.2 million and one hardware client represents $11.0 million). Two of these loans are sponsored buyout loans that were added to our nonaccrual portfolio in 2015, another is a Corporate Finance client that was added during 2016, and the remaining three are loans from our Growth practice (one added during 2017 and the remaining were added during 2018). The total credit exposure for these seven largest nonaccrual loans is $102.5 million, for which we have specifically reserved $41.6 million.

Average nonaccrual loans for the three and six months ended June 30, 2018 were $127.4 million and $119.5 million, respectively, compared to $128.9 million and $127.1 million for the comparable 2017 periods. The $1.5 million decrease in average nonaccrual loans for the three months ended June 30, 2018 compared to June 30, 2017 was primarily from our software/internet and life science/healthcare loan portfolios, partially offset by an increase in our hardware loan portfolio. If the nonaccrual loans had not been impaired, $2.1 million and $4.0 million in interest income would have been recorded for the three and six months ended June 30, 2018, respectively, compared to $2.1 million and $3.9 million for the comparable 2017 periods.

Accrued Interest Receivable and Other Assets

A summary of accrued interest receivable and other assets at June 30, 2018 and December 31, 2017 is as follows:

(Dollars in thousands)	June 30, 2018	December 31, 2017	% Change
Foreign exchange spot contract assets, gross	$ 206,289	$ 208,738	(1.2)%
Derivative assets, gross (1)	249,505	232,152	7.5
Accrued interest receivable	169,649	141,773	19.7
FHLB and Federal Reserve Bank stock	58,864	60,020	(1.9)
Net deferred tax assets	75,286	63,845	17.9
Accounts receivable	57,740	55,946	3.2
Other assets	167,091	113,772	46.9
Total accrued interest receivable and other assets	$ 984,424	$ 876,246	12.3

(1) See “Derivatives” section below.

Accrued Interest Receivable

The increase of $27.9 million in accrued interest receivable was primarily reflective of the strong growth of our loans. Period-end loan balances were $26.0 billion, an increase of $2.9 billion, or 12.5 percent, as compared to December 31, 2017.

Net Deferred Tax Assets

The increase of $11.4 million in net deferred tax assets was primarily due to the decrease in the fair value of AFS securities, an increase the allowance for loan losses and the recognition of tax over book gains on warrant exercises. The increase in net deferred tax assets was partially offset by an increase in the deferred tax liability as a result of the change in book accounting following the adoption of ASU 2016-01.

Other

Other includes various asset amounts for other operational transactions. The increase of $53.3 million was primarily due to a $34.7 million increase in current tax receivable due to the payment in excess of the current quarter's tax provision. Prepaid assets also increased $11.7 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, net at June 30, 2018 and December 31, 2017:

(Dollars in thousands)	June 30, 2018	December 31, 2017	% Change
Assets:			
Equity warrant assets	$ 143,725	$ 123,763	16.1 %
Foreign exchange forward and option contracts	99,358	96,636	2.8
Client interest rate derivatives	6,422	11,753	(45.4)
Total derivative assets	$ 249,505	$ 232,152	7.5
Liabilities:			
Foreign exchange forward and option contracts	$ 84,672	$ 96,641	(12.4)
Client interest rate derivatives	12,532	11,940	5.0
Total derivative liabilities	$ 97,204	$ 108,581	(10.5)

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, 2018, we held warrants in 1,967 companies, compared to 1,868 companies at December 31, 2017. Warrants in 15 companies each had 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. 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, 2018 and 2017:

	Three months ended June 30,		Six months ended June 30,	
(Dollars in thousands)	2018	2017	2018	2017
Balance, beginning of period	$ 135,669	$ 124,233	$ 123,763	$ 131,123
New equity warrant assets	4,299	3,419	9,398	7,492
Non-cash changes in fair value, net	11,012	8,270	19,469	7,294
Exercised equity warrant assets	(6,429)	(3,601)	(7,179)	(13,030)
Terminated equity warrant assets	(826)	(571)	(1,726)	(1,129)
Balance, end of period	$ 143,725	$ 131,750	$ 143,725	$ 131,750

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 $41.4 million at June 30, 2018 and $65.6 million at December 31, 2017. For additional information on our foreign exchange forward contracts and foreign currency option contracts, see Note 9—"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 $3.7 million at June 30, 2018 and $11.7 million at December 31, 2017. For additional information on our client interest rate derivatives, see Note 9—"Derivative Financial Instruments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

Deposits

Deposits were $48.9 billion at June 30, 2018, an increase of $4.6 billion, or 10.5 percent, compared to $44.3 billion at December 31, 2017. The increase in deposits was driven primarily by a healthy equity funding environment across a majority of our market segments with robust activities in the IPO and secondary public offering markets as well as strong new client acquisition. Our SVB Global, Private Equity Division and Life Sciences market segments were the leading contributors to growth in deposits for the second half of 2018.

At June 30, 2018, the aggregate balance of time deposit accounts individually equal to or greater than $100,000 totaled $57 million, compared to $41 million at December 31, 2017. At June 30, 2018, all of 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 14 percent of our total deposits at June 30, 2018 and December 31, 2017, respectively, were from our clients in Asia.

Short-Term Borrowings

We had $0.4 billion in short-term borrowings at June 30, 2018, compared to $1.0 billion at December 31, 2017. On June 29, 2018, we borrowed a total of $0.4 billion from our overnight credit facilities to support the short-term liquidity needs of the Bank. These borrowings were repaid, subsequent to quarter-end, on July 2, 2018.

Long-Term Debt

Our long-term debt was $696.0 million at June 30, 2018 and $695.5 million at December 31, 2017. As of June 30, 2018, long-term debt included our 3.50% Senior Notes and 5.375% Senior Notes. For more information on our long-term debt, see Note 8—"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, 2018 and December 31, 2017 is as follows:

(Dollars in thousands)	June 30, 2018	December 31, 2017	% Change
Foreign exchange spot contract liabilities, gross	$ 269,228	$ 202,807	32.8
Accrued compensation	111,717	167,531	(33.3)
Allowance for unfunded credit commitments	54,103	51,770	4.5
Derivative liabilities, gross (1)	97,204	108,581	(10.5)
Other	530,139	381,066	39.1
Total other liabilities	$ 1,062,391	$ 911,755	16.5

(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 $66.4 million was due primarily to increased client trade activity at period-end as compared to December 31, 2017.

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 $55.8 million was primarily the result of the payout of our 2017 incentive compensation plans during the first quarter of 2018, partially offset by

higher compensation incentive plan accruals for the six months ended June 30, 2018 reflective primarily of our strong full-year expected performance as well as an increase in the number of average FTEs during the first half of 2018.

Other

Other includes various accrued liability amounts for other operational transactions. The increase of $149.1 million was reflective primarily of a $107.8 million increase in unsettled fixed income investment securities purchases, a $60.2 million increase in new commitments for our qualified affordable tax credit funds, partially offset by a $16.7 million decrease in foreign currency unsettled trade liabilities at June 30, 2018 as compared to December 31, 2017.

Noncontrolling Interests

Noncontrolling interests totaled $147.2 million and $139.6 million at June 30, 2018 and December 31, 2017, respectively. The $7.6 million increase was due primarily to income attributable to noncontrolling interests of $22.3 million, partially offset by net distributions of $14.7 million to limited partners from various managed funds of funds for the six months ended June 30, 2018.

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, 2018 and December 31, 2017:

	June 30, 2018		December 31, 2017	
(Dollars in thousands)	Total Balance	Level 3	Total Balance	Level 3
Assets carried at fair value	$ 10,191,403	$ 138,754	$ 11,481,237	$ 122,250
As a percentage of total assets	18.2%	0.2%	22.4%	0.2%
Liabilities carried at fair value	$ 97,204	$ —	$ 108,581	$ —
As a percentage of total liabilities	0.2%	—%	0.2%	—%
As a percentage of assets carried at fair value		1.4%		1.1%

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 15—"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 2017 Form 10-K.

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. During the three and six months ended June 30, 2017, the Level 3 assets that are measured at fair value on a recurring basis experienced net realized and unrealized gains of $10.4 million and $17.1 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. 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 $4.7 billion at June 30, 2018, an increase of $477.9 million, or 11.4 percent, compared to $4.2 billion at December 31, 2017. This increase was due primarily to net income of $432.8 million for the six months ended June 30, 2018 and a net increase to equity of $68.8 million related to the adoption of new accounting guidance partially offset by a decrease in the fair value of our AFS securities portfolio of $52.9 million, net of tax, driven by increases in period-end market interest rates.

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, 2018 and December 31, 2017. 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:

			Minimum Ratios under Applicable Regulatory Capital Adequacy Requirements	
	June 30, 2018	December 31, 2017	"Well Capitalized"	"Adequately Capitalized"
SVB Financial:				
CET 1 risk-based capital ratio	12.92%	12.78%	6.5%	4.5%
Tier 1 risk-based capital ratio	13.10	12.97	8.0	6.0
Total risk-based capital ratio	14.03	13.96	10.0	8.0
Tier 1 leverage ratio	8.81	8.34	N/A	4.0
Tangible common equity to tangible assets ratio (1)	8.34	8.16	N/A	N/A
Tangible common equity to risk-weighted assets ratio (1)	12.68	12.77	N/A	N/A
Bank:				
CET 1 risk-based capital ratio	11.76%	12.06%	6.5%	4.5%
Tier 1 risk-based capital ratio	11.76	12.06	8.0	6.0
Total risk-based capital ratio	12.72	13.04	10.0	8.0
Tier 1 leverage ratio	7.72	7.56	5.0	4.0
Tangible common equity to tangible assets ratio (1)	7.39	7.47	N/A	N/A
Tangible common equity to risk-weighted assets ratio (1)	11.52	11.98	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.

Capital ratios (CET 1, tier 1, and total risk-based capital) for SVB Financial increased as of June 30, 2018, compared to the same ratios as of December 31, 2017 primarily as a result of the adoption of new accounting guidance that resulted in a net increase in capital of $68.8 million. This increase in capital from the adoption of the new accounting guidance, in addition to net income of $432.8 million, more than offset the increases in risk-weighted assets primarily attributable to our robust loan growth

for the first half of 2018. Overall, excluding the impact of the adoption of new accounting guidance, SVB Financial Group's risk-based capital ratios would have decreased as of June 30, 2018, compared to the same ratios as of December 31, 2017.

Capital ratios (CET 1, tier 1, and total risk-based capital) for the Bank decreased as of June 30, 2018, compared to the same ratios as of December 31, 2017. The decrease in the Bank's capital ratios reflected $55.0 million of cash dividends paid by the Bank to our bank holding company, SVB Financial, during the six months ended June 30, 2018.

Both SVB Financial and the Bank's tier 1 leverage ratios increased as of June 30, 2018, compared to December 31, 2017, due to proportionally higher capital from net income to average assets growth during the second of 2018. 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, 2018 and December 31, 2017:

	SVB Financial		Bank	
Non-GAAP tangible common equity and tangible assets (Dollars in thousands, except ratios)	**June 30, 2018**	**December 31, 2017**	**June 30, 2018**	**December 31, 2017**
GAAP SVBFG stockholders' equity	$ 4,657,653	$ 4,179,795	$ 4,068,918	$ 3,762,542
Tangible common equity	$ 4,657,653	$ 4,179,795	$ 4,068,918	$ 3,762,542
GAAP total assets	$ 55,867,745	$ 51,214,467	$ 55,035,371	$ 50,383,774
Tangible assets	$ 55,867,745	$ 51,214,467	$ 55,035,371	$ 50,383,774
Risk-weighted assets	$ 36,727,118	$ 32,736,959	$ 35,326,564	$ 31,403,489
Tangible common equity to tangible assets	8.34%	8.16%	7.39%	7.47%
Tangible common equity to risk-weighted assets	12.68	12.77	11.52	11.98

The tangible common equity to tangible assets ratio decreased for the Bank primarily as a result of the $55.0 million in cash dividends paid by the Bank to our bank holding company, SVB Financial Group, during the six months ended June 30, 2018. The tangible common equity to risk-weighted assets ratio decreased for both SVB Financial and the Bank. The decrease was a result of the proportionally higher increase in risk-weighted assets relative to the increase in tangible common equity. The growth in period-end risk-weighted assets was primarily due to period-end loan growth and higher investment balances driven by increases in deposits.

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 13—"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 13—"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, 2018, our period-end total deposit balances were $48.9 billion, compared to $44.3 billion at December 31, 2017.

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 (using loans and AFS securities as collateral) and an unsecured basis. These include repurchase agreements and uncommitted federal funds lines with various financial institutions. We also pledge securities to the FHLB of San Francisco and the discount window at the Federal Reserve Bank. The fair value of collateral pledged to the FHLB of San Francisco (comprised primarily of loans and U.S. Treasury securities) at June 30, 2018 totaled $3.8 billion, of which $3.4 billion was unused and available to support additional borrowings. The fair value of collateral pledged at the discount window of the FRB (comprised primarily of U.S. Treasury securities and U.S. agency debentures) at June 30, 2018 totaled $0.9 billion, all of which was unused and available to support additional borrowings.

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, 2018, the dividend amount paid was $30 million and $55 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 2017 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, 2018 and 2017. 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)	**2018**	**2017**
Average cash and cash equivalents	$ 2,997,338	$ 3,562,811
Percentage of total average assets	5.6%	7.7%
Net cash provided by operating activities	$ 347,380	$ 396,721
Net cash used for investing activities	(4,570,107)	(2,019,530)
Net cash provided by financing activities	4,011,753	2,931,303
Net (decrease) increase in cash and cash equivalents	$ (210,974)	$ 1,308,494

Average cash and cash equivalents decreased by $0.6 billion, or 15.9 percent, to $3.0 billion for the six months ended June 30, 2018, compared to $3.6 billion for the comparable 2017 period.

Cash provided by operating activities was $347.4 million for the six months ended June 30, 2018, reflective primarily of net income before noncontrolling interests of $455.1 million, partially offset by net decreases in adjustments to reconcile net income to net cash.

Cash used for investing activities of $4.6 billion for the six months ended June 30, 2018 was driven by $4.5 billion in purchases of fixed income investment securities partially offset by $2.7 billion of proceeds from maturities and principal paydowns from our fixed income investment securities portfolio. Additionally, $2.9 billion in cash outflows were used to fund loan growth during the six months ended June 30, 2018.

Cash provided by financing activities was $4.0 billion for the six months ended June 30, 2018, reflective primarily of a net increase of $4.6 billion in deposits partially offset by a decrease of $0.6 billion in our short-term overnight borrowings.

Cash and cash equivalents were $2.7 billion and $3.9 billion, respectively, at June 30, 2018 and June 30, 2017.

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. While all of these risks are important considerations, all are inherently difficult to predict, and it is equally difficult to assess the impact of each on the overall simulation results. Consequently, simulations used to analyze sensitivity of net interest income to interest rate risk will differ from actual results due to differences in the timing, frequency, and 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 12-month forward looking 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, is monitored on an ongoing basis.

Management of interest rate risk is carried out 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 to assist in managing interest rate risk.

We utilize a simulation model to perform sensitivity analysis on the economic value of our equity and our 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 rates on a quarterly basis at a minimum.

Model Simulation and Sensitivity Analysis

A specific application of our simulation model involves measurement of the impact of changes in market interest rates on our economic value of equity ("EVE"). EVE is defined as the market value of assets, less the market value of liabilities, adjusted for any off-balance sheet items, if any. Another application of the simulation model measures the impact of changes in market interest rates on our net interest income ("NII") assuming a static balance sheet as of the period-end reporting date. Meaning, the size and composition of earning assets and funding liabilities are held constant over the simulation horizon. Simulated cash flows during the scenario horizon are assumed to be replaced as they occur, which restores the balance sheet to its original size and composition. More specifically, with respect to earning assets, loan maturities, principal maturities, paydowns and calls on investments are added back as replacement balances as they occur during the simulation horizon. Yield and spread assumptions on cash and investment balances reflect current market rates. 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 us are principally short-term interest rates and include the following benchmark indexes: (i) National and SVB Prime rates, (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, variable rate investment securities 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. Overall, the assumed weighted deposit beta on interest bearing deposits is approximately 35.0 percent, which means deposit repricing is assumed to be approximately 35.0 percent of a given change in short-term interest rates. This repricing is reflected as a change in interest expense on interest bearing deposit balances.

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 bps at June 30, 2018 and at December 31, 2017:

	Estimated	Estimated Increase/(Decrease) in EVE		Estimated	Estimated Increase/(Decrease) in NII	
Change in interest rates (bps) (Dollars in thousands)	EVE	Amount	Percent	NII	Amount	Percent
June 30, 2018:						
200	$ 8,785,908	$ 373,102	4.4 %	$ 2,203,720	$ 407,219	22.7 %
100	8,582,937	170,131	2.0	1,991,979	195,478	10.9
—	8,412,806	—	—	1,796,501	—	—
-100	8,079,862	(332,944)	(4.0)	1,549,652	(246,849)	(13.7)
-200	7,258,778	(1,154,028)	(13.7)	1,311,789	(484,712)	(27.0)
December 31, 2017:						
200	$ 8,091,107	$ 805,624	11.1 %	$ 1,885,885	$ 400,127	26.9 %
100	7,716,066	430,583	5.9	1,683,742	197,984	13.3
—	7,285,483	—	—	1,485,758	—	—
-100	6,637,588	(647,895)	(8.9)	1,252,063	(233,695)	(15.7)
-200	5,718,401	(1,567,082)	(21.5)	1,108,712	(377,046)	(25.4)

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 case EVE as of June 30, 2018 increased from December 31, 2017 by $1.1 billion, driven by changes in balance sheet composition as well as rising interest rates. At June 30, 2018, as compared to December 31, 2017, total loan balances increased by $2.9 billion primarily in Prime-based variable rate loans. Total fixed income securities also increased by $1.7 billion due to purchases of fixed rate long maturity instruments such as pass-through mortgage-backed securities and municipal debt securities combined with run-off of shorter maturity U.S. Treasury securities. Additionally, total deposits increased by $4.6 billion.

Marginally higher LIBOR/swap rates in the 3- to 24-month tenors continue to drive a relatively flat yield curve compared to December 31, 2017. These higher rates contributed to the $1.1 billion total change in base EVE, mainly impacting the market value of deposits. Continued investment in 30-year pass-through mortgage-backed securities and municipal securities resulted in a $261 million decrease in EVE sensitivity in the +100 bps rate shock scenario. Compared to December 31, 2017, EVE in the -100 and -200 bps rate shock scenarios increased $315 million and $413 million, respectively. This represents a decrease in the sensitivity, primarily due to changes in the investment portfolio composition described above.

12-Month Net Interest Income Simulation

Our estimated 12-month NII forecast at June 30, 2018 increased from December 31, 2017 by $311 million, primarily due to increased balances of higher yielding loans and investments as described in the EVE section above. As rates rise, interest income on assets that are tied to variable rate indexes, primarily our variable rate loans, are expected to benefit our base 12-month NII projections. In addition, 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 less than one-half of the amount of simulated changes in short-term market interest rates.

At June 30, 2018, our NII sensitivity, which is measured as the percentage change in 12-month forward net interest income earned in various interest rate scenarios compared to a base scenario where interest rates remain unchanged, decreased to 10.9 percent in the +100 bps interest rate scenario compared to 13.3 percent at December 31, 2017. Our NII sensitivity in the +200 bps interest rate shock scenario declined to 22.7 percent compared to 26.9 percent at December 31, 2017. The slight decline in NII sensitivity is the result of an increase in the composition of longer duration securities in our fixed income portfolio. Despite the decrease in NII sensitivity in rising interest rate scenarios, the current level of variable rate loans, coupled with a large proportion of non-interest bearing deposit balances is expected to result in an increased NII result in a rising rate environment. NII sensitivity in the -100 bps scenario of negative 13.7 percent was also lower at June 30, 2018 compared to negative 15.7 percent at December 31, 2017. The -200 bps scenario currently indicates a greater percentage change in NII at June 30, 2018 compared to December 31, 2017. This is the result of the impact of a full -200 bps decline in the rate scenario. At December 31, 2017, the -200 bps scenario was floored at zero percent, and therefore only produced a drop in rates of approximately 150 bps.

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 down 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 for each interest rate scenario 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, 2018, we implemented ASC 606, Revenue from Contracts with Customers. Although the new revenue standard is expected to have an immaterial impact on our ongoing net income, we did implement changes to our processes related to revenue recognition and the control activities within them. These included the development of new policies based on the five-step model provided in the new revenue standard, 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 16—"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 2017 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	
10.1	Incentive Compensation Plan					
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					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

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 7, 2018

/s/ DANIEL BECK

Daniel Beck
Chief Financial Officer
(Principal Financial Officer)

SVB Financial Group

Date: August 7, 2018

/s/ KAMRAN HUSAIN

Kamran Husain
Chief Accounting Officer
(Principal Accounting Officer)

SVB FINANCIAL GROUP
INCENTIVE COMPENSATION PLAN

As amended July 25, 2018

SECTION 1
BACKGROUND AND PURPOSE

1.1 *Effective Date*. The Plan replaced and superseded the Senior Management Incentive Compensation Plan and any prior versions of the Incentive Compensation Plan, and was originally effective as of October 23, 2013. If the Committee determines as of the date of grant of an award that the award is intended to qualify as Performance-Based Compensation, no amount will be paid pursuant to such award until any stockholder approval required under Section 162(m) of the Code has been obtained.

1.2 *Purpose of the Plan*. The purpose of the Plan is: (1) to motivate, attract, reward and retain highly qualified employees who are important to the Company's success, and (2) to provide competitive compensation incentives relating directly to the financial performance and long-term growth of the Company. The Plan is intended to permit the payment of bonuses that qualify as Performance-Based Compensation.

SECTION 2
DEFINITIONS

The following words and phrases shall have the following meanings unless a different meaning is plainly required by the context:

2.1 *"Actual Award"* means as to any Performance Period, the actual award (if any) payable to a Participant for the Performance Period. Each Actual Award is determined by the Payout Formula for the Performance Period, subject to the Committee's authority under Section 3.6 to modify the award otherwise determined by the Payout Formula.

2.2 *"Affiliate"* means any corporation or other entity (including, but not limited to, partnerships and joint ventures) controlled by the Company.

2.3 *"Base Salary"* means as to any Performance Period, the Participant's annual salary rate. Such Base Salary shall be determined before both (a) deductions for taxes or benefits, and (b) deferrals of compensation pursuant to any Company or Affiliate sponsored plans.

2.4 *"Board"* means the Board of Directors of the Company.

2.5 *"Code"* means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation thereunder shall include such section or regulation, any valid regulation promulgated thereunder, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

2.6 *"Committee"* means the Compensation Committee of the Board, or any other committee appointed by the Board (pursuant to Section 5.1) to administer the Plan.

2.7 *"Company"* means SVB Financial Group, a Delaware corporation, or any successor thereto.

2.8 *"Determination Date"* means as to an award intended to qualify as Performance-Based Compensation, the latest possible date that will not jeopardize the award's qualification as Performance-Based Compensation.

2.9 "*Disability*" means the occurrence of one or more of the following:

- Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months;
- Participant is, by reason of any medically determinable physical or mental impairment that can be expected to result in death or that can be expected to last for a continuous period of not less than twelve (12) months, receiving income replacement benefits for a period of not less than three (3) months under an accident and health plan covering Company employees;
- Participant is determined to be totally disabled by the Social Security Administration; or
- Participant is determined to be disabled in accordance with the Company's long-term disability insurance program, as may be in effect from time to time.

2.10 *"Employee"* means any employee of the Company or of an Affiliate, whether such employee is so employed at the time the Plan is adopted or becomes so employed subsequent to the adoption of the Plan.

2.11 *"Fiscal Year"* means the fiscal year of the Company.

2.12 *"Individual Objectives"* means quantifiable objectively determinable goals set by the Committee that will measure the individual's performance of his or her overall duties to the Company which may include, without limitation, any enumerated Performance Goal, measures related to long-term strategic plans, and measures related to succession plans.

2.13 *"Maximum Award"* means any maximum adopted by the Committee as to any Participant for any Performance Period. With respect to an award intended to qualify as Performance-Based Compensation such maximum will be formalized in the Plan document and approved by the Company's stockholders.

2.14 *"Participant"* means as to any Performance Period, an Employee who has been selected by the Committee for participation in the Plan for that Performance Period.

2.15 *"Payout Formula"* means as to any Performance Period, the formula or payout matrix established by the Committee pursuant to Section 3.4 in order to determine the Actual Awards (if any) to be paid to Participants. The formula or matrix may differ from Participant to Participant.

2.16 "*Performance-Based Compensation*" means bonuses under the Plan qualifying as "performance-based compensation" under Section 162(m) of the Code.

2.17 *"Performance Goals"* means the goal(s) (or combined goal(s)) determined by the Committee (in its discretion) to be applicable to a Participant for a Target Award for a Performance Period. As determined by the Committee, the Performance Goals for any Target Award applicable to a Participant may provide for a targeted level or levels of achievement using one or more of the following measures: (i) share price, (ii) earnings per share, (iii) total stockholder return, (iv) operating margin, (v) gross margin, (vi) return on equity, (vii) return on assets, (viii) return on investment, (ix) operating income, (x) net operating income, (xi) pre-tax profit, (xii) cash flow, (xiii) revenue, (xiv) expenses, (xv) earnings before interest, taxes and depreciation, (xvi) economic value added, (xvii) market share, (xviii) net income, (xix) personal goals, (xx) sales, (xxi) improvements in capital structure, (xxii)

earnings before interest, taxes and amortization, (xxiii) budget comparisons, (xxiv) controllable profits, (xxv) expense management, (xxvi) improvements in capital structure, (xxvii) profit margins, (xxviii) operating or gross margin, (xxix) profitability of an identifiable business unit or product, (xxx) cash flow, operating cash flow, or cash flow or operating cash flow per share, (xxxi) reduction in costs, (xxxii) return on capital, (xxxiii) improvement in or attainment of expense levels or working capital level, (xxxiv) earnings before interest, taxes, depreciation and amortization, and (xxxv) Individual Objectives. The performance criteria may be applicable to the Company or an Affiliate as a whole or a segment of the Company or an Affiliate, and if so, such criteria may be: (i) used to measure specific performance levels or growth over certain performance periods, and/or (ii) measured relative to a peer group or index. In addition, with respect to awards intended to qualify as Performance-Based Compensation, the performance criteria shall be calculated in accordance with generally accepted accounting principles, but excluding the effect (whether positive or negative) of any change in accounting standards and any extraordinary, unusual or nonrecurring item, as determined by the Committee, occurring after the establishment of the Performance Goals for the Performance Period. Each such adjustment, if any, shall be made solely for the purpose of providing a consistent basis from period to period for the calculation of the Performance Goals in order to prevent the dilution or enlargement of a Participant's rights with respect to an award intended to qualify as Performance-Based Compensation. The Performance Goals may differ from Participant to Participant and from award to award. Awards not intended to qualify as Performance-Based Compensation may take into account other measures, including subjective measures. With respect to awards not intended to qualify as Performance-Based Compensation, the performance criteria may include the effect (whether positive or negative) of any change in accounting standards and any extraordinary, unusual or nonrecurring item, as determined by the Committee, occurring after the establishment of the Performance Goals for the Performance Period.

2.18 *"Performance Period"* means any period of time which does not exceed five Fiscal Years, as determined by the Committee in its sole discretion.

2.19 *"Plan"* means the SVB Financial Group Incentive Compensation Plan, as set forth in this instrument and as hereafter amended from time to time.

2.20 *"Shares"* means shares of the Company's common stock.

2.21 *"Target Award"* means the target award payable under the Plan to a Participant for the Performance Period, expressed:

a. For exempt employees - as a percentage of his or her Base Salary during the Performance Period or a specific dollar amount, as determined by the Committee

b. For nonexempt employees - as a percentage of actual gross wages (including overtime premium pay, but excluding any ICP or comparable bonus awards), earned or received during the Performance Period in accordance with Section 3.3.

2.22 *"Termination of Employment"* means a cessation of the employee-employer relationship between an Employee and the Company or an Affiliate for any reason, including, but not by way of limitation, a termination by resignation, discharge, death, Disability, retirement, or the disaffiliation of an Affiliate, but excluding any such termination where there is a simultaneous reemployment by the Company or an Affiliate.

SECTION 3
SELECTION OF PARTICIPANTS AND DETERMINATION OF AWARDS

3.1 *Selection of Participants.* The Committee, in its sole discretion, shall select the Employees who shall be Participants for any Performance Period. The Committee, in its sole discretion, may also designate as Participants one or more individuals (by name or position) who are expected to become Employees during a Performance Period. Participation in the Plan is in the sole discretion of the Committee, and on a Performance

Period by Performance Period basis. Accordingly, an Employee who is a Participant for a given Performance Period in no way is guaranteed or assured of being selected for participation in any subsequent Performance Period.

3.2 *Determination of Performance Goals*. The Committee, in its sole discretion, shall establish the Performance Goals for each Participant for the Performance Period. Such Performance Goals shall be set forth in writing.

3.3 *Determination of Target Awards*. The Committee, in its sole discretion, shall establish a Target Award for each Participant. Each Participant's Target Award shall be determined by the Committee in its sole discretion, and each Target Award shall be set forth in writing.

3.4 *Determination of Payout Formula or Formulae*. The Committee, in its sole discretion, shall establish a Payout Formula or Formulae for purposes of determining the Actual Award (if any) payable to each Participant. Each Payout Formula shall (a) be in writing, (b) be based on a comparison of actual performance to the Performance Goals, (c) provide for the payment of a Participant's Target Award if the Performance Goals for the Performance Period are achieved, and (d) provide for an Actual Award greater than or less than the Participant's Target Award, depending upon the extent to which actual performance exceeds or falls below the Performance Goals. A nonexempt employee's Actual Award shall be based upon a percentage of gross wages earned during the Performance Period, as defined in Section 2.21(b). Notwithstanding the preceding, with respect to an Actual Award intended to qualify as Performance-Based Compensation, in no event shall a Participant's Actual Award for any Performance Period exceed his or her Maximum Award.

3.5 *Date for Determinations*. With respect to awards intended to qualify as Performance-Based Compensation, the Committee shall make all determinations under Section 3.1 through 3.4 on or before the Determination Date.

3.6 *Determination of Actual Awards*. After the end of each Performance Period, the Committee shall certify in writing the extent to which the Performance Goals applicable to each Participant for the Performance Period were achieved or exceeded. The Actual Award for each Participant shall be determined by applying the Payout Formula to the level of actual performance that has been certified by the Committee. Notwithstanding any contrary provision of the Plan, the Committee, in its sole discretion, may (a) eliminate or reduce the Actual Award payable to any Participant below that which otherwise would be payable under the Payout Formula, and (b) determine whether, to what extent and under what circumstances a Participant will receive an Actual Award in the event the Participant incurs a Termination of Employment prior to the date the Actual Award is to be paid, including determining the timing of payment of such Actual Award (subject to the provisions of Section 4.2). In addition, notwithstanding any contrary provision of the Plan, with respect to an Actual Award not intended to qualify as Performance-Based Compensation, the Committee, in its sole discretion, may increase the Actual Award payable to any Participant above that which otherwise would be payable under the Payout Formula. To the extent in compliance with Section 162(m) of the Code for awards intended to qualify as Performance-Based Compensation, for any Performance Period, the Committee may make such other or additional awards to any Participant as it deems appropriate, so long as the aggregate awards made under the Plan do not exceed the maximum reserved pool of cash available for awards for the Performance Period (if a maximum has been established by the Committee).

SECTION 4
PAYMENT OF AWARDS

4.1 *Right to Receive Payment*. Each Actual Award that may become payable under the Plan shall be paid solely from the general assets of the Company or the Affiliate that employs the Participant (as the case may be), as determined by the Committee. Nothing in this Plan shall be construed to create a trust or to establish or evidence any Participant's claim of any right to payment of an Actual Award other than as an unsecured general creditor with respect to any payment to which he or she may be entitled.

4.2 *Timing of Payment*. Subject to Section 3.6 and Section 6.7, payment of each Actual Award shall be made as soon as administratively practicable, but in no event later than March 15 of the calendar year following the calendar year which includes the last day of the Performance Period during which the award was earned. Unless otherwise determined by the Committee, to earn an Actual Award a Participant must be employed by the Company or any Affiliate on the date the Actual Award is paid.

4.3 *Form of Payment*. Each Actual Award normally shall be paid in cash (or its equivalent) in a single lump sum. However, the Committee, in its sole discretion, may declare any Actual Award, in whole or in part, payable in Shares of restricted stock, restricted stock units, options and/or other stock awards granted under one of the Company's stock plans. The number of Shares of restricted stock, restricted stock units, options and/or other stock awards granted shall be determined in the sole discretion of the Committee.

4.4 *Clawback Policy*. Notwithstanding anything contained herein to the contrary, the Actual Award and any cash, Shares or other property acquired in connection with the Actual Award 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 of Employment.

SECTION 5
ADMINISTRATION

5.1 *Committee is the Administrator*. The Plan shall be administered by the Committee. With respect to awards intended to qualify as Performance-Based Compensation, the Committee shall consist of not less than two (2) members of the Board. The members of the Committee shall be appointed from time to time by, and serve at the pleasure of, the Board. With respect to awards intended to qualify as Performance-Based Compensation, each member of the Committee shall qualify as an "outside director" under section 162(m) of the Code. If it is later determined that one or more members of the Committee do not so qualify, actions taken by the Committee prior to such determination shall be valid despite such failure to qualify.

5.2 *Committee Authority*. It shall be the duty of the Committee to administer the Plan in accordance with the Plan's provisions. The Committee shall have all powers and discretion necessary or appropriate to administer the Plan and to control its operation, including, but not limited to, the power to (a) determine which Employees shall be granted awards, (b) prescribe the terms and conditions of awards, (c) interpret the Plan and the awards, (d) adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside of the United States, (e) bifurcate the Plan and treat Participants differently as provided by Section 8.1, (f) adopt rules for the administration, interpretation and application of the Plan as are consistent therewith, and (g) interpret, amend or revoke any such rules.

5.3 *Decisions Binding*. All determinations and decisions made by the Committee, the Board, and any delegate of the Committee pursuant to the provisions of the Plan shall be final, conclusive, and binding on all persons, and shall be given the maximum deference permitted by law.

5.4 Delegation by the Committee. The Committee, in its sole discretion and on such terms and conditions as it may provide, may delegate all or part of its authority and powers under the Plan to one or more directors and/or officers of the Company; provided, however, that the Committee may delegate its authority and powers only with respect to awards that are not intended to qualify as Performance-Based Compensation and only to the extent consistent with the rules and regulations of the principal securities market on which the Company's securities are listed or qualified for trading.

SECTION 6
GENERAL PROVISIONS

6.1 *Tax Withholding*. The Company or an Affiliate, as determined by the Committee, shall withhold all applicable taxes from any Actual Award, including any federal, state and local taxes.

6.2 *No Effect on Employment*. Nothing in the Plan shall interfere with or limit in any way the right of the Company or an Affiliate, as applicable, to terminate any Participant's employment or service at any time, with or without cause. For purposes of the Plan, transfer of employment of a Participant between the Company and any one of its Affiliates (or between Affiliates) shall not be deemed a Termination of Employment. Employment with the Company and its Affiliates is on an at-will basis only. Except as may be provided in an employment contract with the Participant, the Company expressly reserves the right, which may be exercised at any time and without regard to when during or after a Performance Period such exercise occurs, to terminate any individual's employment or service with or without cause, and to treat him or her without regard to the effect which such treatment might have upon him or her as a Participant.

6.3 *Participation*. No Employee shall have the right to be selected to receive an award under this Plan, or, having been so selected, to be selected to receive a future award. Participation in this Plan shall not give any Employee the right to participate in any other benefit, stock or deferred compensation plan of the Company or any Affiliate.

6.4 *Successors*. All obligations of the Company under the Plan, with respect to awards granted hereunder, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business or assets of the Company.

6.5 *Beneficiary Designations*. If permitted by the Committee, a Participant under the Plan may name a beneficiary or beneficiaries to whom any vested but unpaid award shall be paid in the event of the Participant's death. Each such designation shall revoke all prior designations by the Participant and shall be effective only if given in a form and manner acceptable to the Committee. In the absence of any such designation, any vested benefits remaining unpaid at the Participant's death shall be paid to the Participant's estate.

6.6 *Non Transferability of Awards*. No award granted under the Plan may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will, by the laws of descent and distribution, or to the limited extent provided in Section 6.5. All rights with respect to an award granted to a Participant shall be available during his or her lifetime only to the Participant.

6.7 *Deferrals*. The Committee, in its sole discretion, may permit a Participant to defer receipt of the payment of cash or stock that would otherwise be delivered to a Participant under the Plan. Any such deferral elections shall be subject to such rules and procedures as shall be determined by the Committee in its sole discretion.

SECTION 7
AMENDMENT, TERMINATION AND DURATION

7.1 *Amendment, Suspension or Termination*. The Board or the Committee, each in its sole discretion, may amend or terminate the Plan, or any part thereof, at any time and for any reason. No award may be granted during any period of suspension or after termination of the Plan.

7.2 *Duration of the Plan*. The Plan shall commence on the date specified herein, and subject to Section 7.1 (regarding the Board's or the Committee's right to amend or terminate the Plan), shall remain in effect thereafter.

SECTION 8
LEGAL CONSTRUCTION

8.1 *Section 162(m) Conditions; Bifurcation of Plan*. With respect to awards intended to qualify as Performance-Based Compensation, it is the intent of the Company that the Plan and the awards paid under the Plan satisfy any applicable requirements of section 162(m) of the Code, and, with respect to such awards, any provision, application or interpretation of the Plan inconsistent with this intent shall be disregarded. The provisions of the Plan may be bifurcated by the Board or the Committee at any time so that certain provisions of the Plan, or any award, required in order to satisfy the requirements of section 162(m) of the Code are only applicable to awards intended to qualify as Performance-Based Compensation. Notwithstanding the foregoing, the Committee may, in its sole discretion, grant awards under the Plan that are not intended to qualify as Performance-Based Compensation.

8.2 *Gender and Number*. Except where otherwise indicated by the context, any masculine term used herein also shall include the feminine; the plural shall include the singular and the singular shall include the plural.

8.3 *Severability*. In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

8.4 *Requirements of Law*. The granting of awards under the Plan shall be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

8.5 *Governing Law*. The Plan and all awards shall be construed in accordance with and governed by the laws of the State of California, but without regard to its conflict of law provisions.

8.6 *Captions*. Captions are provided herein for convenience only, and shall not serve as a basis for interpretation or construction of the Plan.

* * * *

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 7, 2018

/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 7, 2018

/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, 2018, (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 7, 2018

/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, 2018, (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 7, 2018

/s/ DANIEL BECK

Daniel Beck
Chief Financial Officer
(Principal Financial Officer)