FEDERAL DEPOSIT INSURANCE CORPORATION

Washington, D.C. 20429

FORM 10-Q

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

For the quarterly period ended March 31, 2020

OR

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

For the transition period from to

FIRST REPUBLIC BANK

(Exact name of registrant as specified in its charter)

California	**80-0513856**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
111 Pine Street, 2nd Floor, San Francisco, CA	**94111**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(415) 392-1400**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	**FRC**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.70% Noncumulative Perpetual Series F Preferred Stock	**FRC-PrF**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.50% Noncumulative Perpetual Series G Preferred Stock	**FRC-PrG**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.125% Noncumulative Perpetual Series H Preferred Stock	**FRC-PrH**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.50% Noncumulative Perpetual Series I Preferred Stock	**FRC-PrI**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 4.70% Noncumulative Perpetual Series J Preferred Stock	**FRC-PrJ**	**New York Stock Exchange**

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

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

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

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

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

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

The number of shares outstanding of the Bank's common stock, par value $0.01 per share, as of April 30, 2020 was 171,468,936.

FIRST REPUBLIC BANK
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SIGNATURES

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

FIRST REPUBLIC BANK
CONSOLIDATED BALANCE SHEETS
(Unaudited)

(in thousands, except share amounts)	March 31, 2020	December 31, 2019
ASSETS		
Cash and cash equivalents	$ 3,949,378	$ 1,699,557
Debt securities available-for-sale (amortized cost of $1,220,889 and no allowance for credit losses at March 31, 2020)	1,243,798	1,282,169
Debt securities held-to-maturity (fair value of $18,355,309 and $17,765,944 at March 31, 2020 and December 31, 2019, respectively)	17,534,920	17,147,633
Less: Allowance for credit losses	(5,087)	—
Debt securities held-to-maturity, net	17,529,833	17,147,633
Equity securities (fair value)	19,575	19,586
Loans	95,285,062	90,796,831
Less: Allowance for credit losses	(541,906)	(496,104)
Loans, net	94,743,156	90,300,727
Loans held for sale	354,873	23,304
Investments in life insurance	1,460,909	1,434,642
Tax credit investments	1,106,693	1,100,509
Premises, equipment and leasehold improvements, net	392,953	386,841
Goodwill and other intangible assets	232,985	235,269
Other real estate owned	1,071	—
Other assets	2,879,705	2,633,397
Total Assets	$ 123,914,929	$ 116,263,634
LIABILITIES AND EQUITY		
Liabilities:		
Deposits:		
Noninterest-bearing checking	$ 36,920,635	$ 33,124,265
Interest-bearing checking	20,941,790	19,696,859
Money market checking	12,636,674	12,790,707
Money market savings and passbooks	9,052,690	10,586,355
Certificates of deposit	14,140,550	13,935,060
Total Deposits	93,692,339	90,133,246
Short-term borrowings	—	800,000
Long-term FHLB advances	16,250,000	12,200,000
Senior notes	994,742	497,719
Subordinated notes	777,990	777,885
Other liabilities	1,840,093	2,003,677
Total Liabilities	113,555,164	106,412,527
Shareholders' Equity:		
Preferred stock, $0.01 par value per share; 25,000,000 shares authorized; 1,145,000 shares issued and outstanding at both March 31, 2020 and December 31, 2019	1,145,000	1,145,000
Common stock, $0.01 par value per share; 400,000,000 shares authorized; 171,394,527 and 168,620,708 shares issued and outstanding at March 31, 2020 and December 31, 2019, respectively	1,714	1,686
Additional paid-in capital	4,543,650	4,214,915
Retained earnings	4,652,089	4,484,375
Accumulated other comprehensive income	17,312	5,131
Total Shareholders' Equity	10,359,765	9,851,107
Total Liabilities and Shareholders' Equity	$ 123,914,929	$ 116,263,634

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(Unaudited)

($ in thousands, except per share amounts)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019
Interest income:		
Loans	$ 796,652	$ 700,088
Investments	148,569	133,765
Other	6,960	5,175
Cash and cash equivalents	3,940	7,989
Total interest income	956,121	847,017
Interest expense:		
Deposits	118,845	107,747
Borrowings	85,144	64,232
Total interest expense	203,989	171,979
Net interest income	752,132	675,038
Provision for credit losses	48,097	14,200
Net interest income after provision for credit losses	704,035	660,838
Noninterest income:		
Investment management fees	99,296	84,924
Brokerage and investment fees	15,826	7,659
Insurance fees	2,157	2,114
Trust fees	4,976	3,889
Foreign exchange fee income	12,184	8,631
Deposit fees	6,597	6,320
Loan and related fees	6,114	4,007
Loan servicing fees, net	1,652	3,788
Gain on sale of loans	1,925	359
Gain (loss) on investment securities	2,628	(149)
Income from investments in life insurance	8,160	9,335
Other income	2,529	1,441
Total noninterest income	164,044	132,318
Noninterest expense:		
Salaries and employee benefits	361,204	313,253
Information systems	70,715	67,170
Occupancy	53,641	43,895
Professional fees	13,117	11,681
Advertising and marketing	11,843	15,734
FDIC assessments	10,185	8,903
Provision (reversal of provision) for unfunded loan commitments	14,273	(217)
Other expenses	61,312	64,393
Total noninterest expense	596,290	524,812
Income before provision for income taxes	271,789	268,344
Provision for income taxes	53,103	41,753
Net income	218,686	226,591
Dividends on preferred stock	13,020	12,787
Net income available to common shareholders	$ 205,666	$ 213,804
Net income	$ 218,686	$ 226,591
Other comprehensive income (loss), net of tax:		
Net unrealized gain on debt securities available-for-sale	12,273	5,572
Reclassification of loss on debt securities available-for-sale to net income	81	573
Amortization of unrealized gain on debt securities transferred from available-for-sale to held-to-maturity	(173)	(219)
Other comprehensive income	12,181	5,926
Comprehensive income	$ 230,867	$ 232,517
Basic earnings per common share	$ 1.20	$ 1.28
Diluted earnings per common share	$ 1.20	$ 1.26

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)

(in thousands, except share amounts)	Common Stock Shares	Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2019	**168,620,708**	**$1,145,000**	**$ 1,686**	**$4,214,915**	**$4,484,375**	**$ 5,131**	**$ 9,851,107**
Cumulative adjustments from adoption of new accounting guidance	—	—	—	—	(4,677)	—	(4,677)
Balance at January 1, 2020	**168,620,708**	**1,145,000**	**1,686**	**4,214,915**	**4,479,698**	**5,131**	**9,846,430**
Net income	—	—	—	—	218,686	—	218,686
Other comprehensive income	—	—	—	—	—	12,181	12,181
Issuance of common stock, net	2,500,000	—	25	290,575	—	—	290,600
Stock compensation expense	—	—	—	36,410	—	—	36,410
Net issuance of common stock under stock plans	273,819	—	3	1,750	—	—	1,753
Dividends on preferred stock (see Note 12)	—	—	—	—	(13,020)	—	(13,020)
Dividends on common stock ($0.19/share)	—	—	—	—	(33,275)	—	(33,275)
Balance at March 31, 2020	**171,394,527**	**$1,145,000**	**$ 1,714**	**$4,543,650**	**$4,652,089**	**$ 17,312**	**$ 10,359,765**
Balance at December 31, 2018	**164,901,950**	**$ 940,000**	**$ 1,649**	**$4,024,306**	**$3,731,205**	**$ (19,383)**	**$ 8,677,777**
Net income	—	—	—	—	226,591	—	226,591
Other comprehensive income	—	—	—	—	—	5,926	5,926
Issuance of common stock, net	2,000,000	—	20	170,565	—	—	170,585
Stock compensation expense	—	—	—	26,312	—	—	26,312
Net issuance of common stock under stock plans	491,285	—	5	(17,710)	—	—	(17,705)
Dividends on preferred stock (see Note 12)	—	—	—	—	(12,787)	—	(12,787)
Dividends on common stock ($0.18/share)	—	—	—	—	(30,715)	—	(30,715)
Balance at March 31, 2019	**167,393,235**	**$ 940,000**	**$ 1,674**	**$4,203,473**	**$3,914,294**	**$ (13,457)**	**$ 9,045,984**

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

($ in thousands)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019
Operating Activities:		
Net income	$ 218,686	$ 226,591
Adjustments to reconcile net income to net cash provided by operating activities:		
Provisions for credit losses and unfunded loan commitments	62,370	14,200
Depreciation, amortization and accretion, net	37,153	26,435
Amortization of mortgage servicing rights	3,347	3,270
Provision for mortgage servicing rights in excess of fair value	650	—
Deferred income taxes	1,864	23,509
Gain on sale of loans	(1,925)	(359)
(Gain) loss on investment securities	(2,628)	149
Noncash cost of stock plans	36,410	26,312
Other net losses	1,132	—
Loans originated or purchased for sale	(253,669)	(30,504)
Proceeds from sales and principal repayments of loans held for sale	408,538	28,990
Decrease in other assets	13,945	383
Decrease in other liabilities	(294,320)	(78,734)
Net Cash Provided by Operating Activities	231,553	240,242
Investing Activities:		
Loan originations, net of principal collections	(5,252,073)	(1,460,699)
Loans purchased	—	(77,231)
Loans sold	91,813	151,256
Proceeds from sales and paydowns of debt securities available-for-sale	193,022	239,384
Purchases of debt securities held-to-maturity	(879,204)	(207,388)
Proceeds from sales and paydowns of debt securities held-to-maturity	541,058	202,000
Purchases of FHLB stock and other investments	(126,157)	(29,970)
Proceeds from redemptions of FHLB stock	—	54,810
Purchases of investments in life insurance	(18,147)	(18,147)
Net change in tax credit and other investments	(39,305)	(38,141)
Additions to premises, equipment and leasehold improvements, net	(38,886)	(33,748)
Net Cash Used for Investing Activities	(5,527,879)	(1,217,874)
Financing Activities:		
Net increase in deposits	3,553,953	2,550,457
Net decrease in short-term borrowings	(800,000)	(100,000)
Proceeds from long-term debt	6,150,000	400,000
Repayment of long-term debt	(1,600,000)	(1,100,000)
Payment of long-term debt issuance costs	(3,329)	—
Net proceeds from issuance of common stock	290,600	170,585
Proceeds from employee stock purchase plan and stock options exercised	7,058	4,240
Payments of employee taxes withheld from share-based awards	(5,840)	(21,911)
Dividends on preferred stock	(13,020)	(12,787)
Dividends on common stock	(33,275)	(30,715)
Net Cash Provided by Financing Activities	7,546,147	1,859,869
Increase in Cash and Cash Equivalents	2,249,821	882,237
Cash and Cash Equivalents at the Beginning of Period	1,699,557	2,811,159
Cash and Cash Equivalents at the End of Period	$ 3,949,378	$ 3,693,396
Supplemental Disclosure of Cash Flow Items:		
Cash paid:		
Interest	$ 214,860	$ 163,396
Income taxes	$ 43,226	$ 49,800
Non-cash activities:		
Transfer of loans to held for sale	$ 763,884	$ 61,801
Transfer of loans to debt securities available-for-sale	$ 177,786	$ 77,231
Transfer of repossessed assets from loans to other assets	$ 637	$ —

See accompanying notes to consolidated financial statements.

Note 1. Summary of Significant Accounting Policies

Basis of Presentation and Organization

First Republic Bank ("First Republic" or the "Bank") is a California-chartered commercial bank and trust company headquartered in San Francisco with deposits insured by the Federal Deposit Insurance Corporation ("FDIC"). First Republic has operated for 34 years and the current legal entity has been operating since July 1, 2010. Our consolidated financial statements include First Republic and the following wholly-owned subsidiaries: First Republic Investment Management, Inc. ("FRIM"), First Republic Securities Company, LLC ("FRSC"), First Republic Trust Company of Delaware LLC ("FRTC Delaware"), First Republic Trust Company of Wyoming, LLC ("FRTC Wyoming") and First Republic Lending Corporation ("FRLC"). Gradifi, Inc. ("Gradifi") was also a wholly-owned subsidiary of First Republic until it was sold on December 9, 2019. All significant intercompany balances and transactions have been eliminated.

The accompanying consolidated financial statements are unaudited, but in the opinion of management, reflect all adjustments necessary for a fair presentation of the Bank's financial position and results of operations. All such adjustments were of a normal and recurring nature. These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information and with the instructions to the Quarterly Report on Form 10-Q adopted by the FDIC. These consolidated financial statements are intended to be read in conjunction with the Bank's consolidated financial statements, and notes thereto, for the year ended December 31, 2019, included in the Bank's Annual Report on Form 10-K filed with the FDIC (the "2019 Form 10-K"). Operating results for the interim periods disclosed herein are not necessarily indicative of the results that may be expected for a full year or any future period.

Nature of Operations

First Republic and its subsidiaries offer private banking, private business banking and private wealth management, including investment, trust and brokerage services. First Republic specializes in delivering exceptional, relationship-based service and offers a complete line of products, including residential, commercial and personal loans, deposit services, and wealth management. Services are offered through preferred banking or wealth management offices primarily in San Francisco, Palo Alto, Los Angeles, Santa Barbara, Newport Beach and San Diego, California; Portland, Oregon; Boston, Massachusetts; Palm Beach, Florida; Greenwich, Connecticut; New York, New York; and Jackson, Wyoming.

First Republic originates real estate secured loans and other loans. Real estate secured loans are secured by single family residences, multifamily buildings, and commercial real estate properties and include loans to construct such properties. Most of the real estate loans that First Republic originates are secured by properties located close to one of its offices in the San Francisco Bay Area, the Los Angeles area, San Diego, Boston, or the New York City area. First Republic originates business loans, loans secured by securities and other types of collateral and personal unsecured loans primarily to meet the non-mortgage needs of First Republic's clients. Most of these loans are also made to borrowers in the geographic areas served by the Bank's offices.

First Republic offers its clients various wealth management services. First Republic provides investment management services through FRIM, which earns fee income from the management of equity securities, fixed income securities, balanced portfolios, and alternative investments for its clients. First Republic Trust Company, a division of First Republic, FRTC Delaware, and FRTC Wyoming (collectively, the "Trust Company") provide trust and custody services. FRSC is a registered broker-dealer that performs brokerage and investment activities for clients. The Bank offers insurance solutions through FRSC and FRIM. The Bank also offers money market mutual funds to clients through third-party providers and conducts foreign exchange activities on behalf of clients.

Reclassifications

Certain prior period amounts have been reclassified to conform to the current period presentation.

Accounting Standards Adopted in 2020

During the quarter ended March 31, 2020, the Bank adopted the following Accounting Standards Updates (“ASUs”) issued by the Financial Accounting Standards Board (“FASB”):

ASU 2016-13—Financial Instruments—Credit Losses (Accounting Standards Codification (“ASC”) 326): Measurement of Credit Losses on Financial Instruments and subsequent related ASUs

ASC 326 revises the methodology for estimating credit losses on loans receivable, held-to-maturity debt securities, and off-balance sheet credit exposures including unfunded loan commitments. ASC 326 requires that the allowance for credit losses be based on current expected credit losses (“CECL”) over the life of the asset, rather than incurred losses. For available-for-sale debt securities that have experienced a deterioration in credit, ASC 326 requires an allowance for credit losses to be recognized, instead of a direct write-down, which was previously required under the other-than-temporary impairment model.

This guidance was adopted effective January 1, 2020 using a modified retrospective approach with no adjustments to prior period comparative financial statements. Upon adoption, the Bank recorded a cumulative effect adjustment to decrease retained earnings by $4.7 million, with corresponding adjustments to allowance for credit losses on held-to-maturity debt securities and loans, allowance for unfunded loan commitments, and deferred tax assets on its consolidated balance sheet effective January 1, 2020. A summary of the impact to the consolidated balance sheet at the adoption date is presented in the table below:

($ in thousands)	Balance at January 1, 2020 (before adjustment)	Cumulative effect adjustment amount	Adjustment impact	Balance at January 1, 2020 (after adjustment)
Assets:				
Allowance for credit losses—held-to-maturity debt securities	$ —	$ (4,669)	Increase	$ (4,669)
Allowance for credit losses—loans	(496,104)	1,675	Decrease	(494,429)
Deferred tax assets [(1)]	393,426	1,985	Increase	395,411
Total impact to assets		(1,009)	Net Decrease	
Liabilities and equity:				
Allowance for unfunded loan commitments [(2)]	12,029	3,668	Increase	15,697
Retained earnings	4,484,375	(4,677)	Decrease	4,479,698
Total impact to liabilities and equity		(1,009)	Net Decrease	

(1) Included in other assets on the consolidated balance sheets.

(2) Included in other liabilities on the consolidated balance sheets.

ASC 326 also requires additional or revised disclosures related to loans and debt securities. Refer to Note 3, “Investment Securities and Allowance for Credit Losses,” and Note 4, “Loans and Allowance for Credit Losses,” for these disclosures. Also refer to “—Accounting Policies for Investments in Debt Securities, Loans and Allowance for Credit Losses” below for discussion of the changes in the Bank’s accounting policies resulting from the adoption of ASC 326.

ASU 2017-04—Intangibles—Goodwill and Other (ASC 350): Simplifying the Test for Goodwill Impairment

The amendments simplify the accounting for goodwill impairment by removing Step 2 of the impairment test, which compared the implied fair value of goodwill to its carrying amount. Measuring the implied fair value of goodwill followed the same process as determining the fair value of individual assets and liabilities assumed in a business combination, which was complex. The amended guidance simplifies the impairment test to only require a comparison of the fair value of a reporting unit with its carrying amount, including the effect of tax deductible goodwill on the carrying amount of the reporting unit. Entities still have the option to perform a qualitative assessment to determine if the quantitative impairment test is needed.

The Bank adopted this guidance effective January 1, 2020 on a prospective basis. The adoption of this guidance did not have a material impact on its consolidated financial statements.

ASU 2018-13—Fair Value Measurement (ASC 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement

The amendments revise certain disclosure requirements for fair value measurements. The amendments remove the requirement to disclose the amounts and reasons for transfers between Levels 1 and 2 of the fair value hierarchy, the Bank's policy for the timing of transfers between levels, and the valuation processes for Level 3 fair value measurements. In addition, the amendments require disclosures of the changes in unrealized gains and losses included in other comprehensive income for recurring Level 3 fair value measurements and the range and weighted average of significant unobservable inputs to develop Level 3 fair value measurements.

The Bank adopted this guidance effective January 1, 2020. The Bank prospectively applied amendments to add new disclosures, while amendments to remove disclosures were applied retrospectively to all periods presented in the consolidated financial statements beginning in the first quarter of 2020. The adoption of this guidance did not have a material impact on the disclosures in the notes to its consolidated financial statements.

ASU 2018-15—Intangibles—Goodwill and Other—Internal-Use Software (ASC 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract

The amendments require certain implementation costs for cloud computing arrangements that are service contracts to be capitalized under the internal-use software guidance. Capitalized costs should generally be amortized over the term of the arrangement on a straight-line basis. The amortization term includes fixed non-cancellable periods plus renewal periods the customer is reasonably certain to exercise, termination periods the customer is reasonably certain not to exercise, and periods covered by an option to extend that is controlled by the vendor.

When an arrangement includes multiple elements (e.g., hosting service, software license, professional service), the amendments require the purchase price be allocated based on the relative standalone price of each element. This requirement will also be applicable to internal-use software.

The Bank adopted this guidance effective January 1, 2020 on a prospective basis. The adoption of this guidance did not have a material impact on its consolidated financial statements.

Accounting Policies for Investments in Debt Securities, Loans and Allowance for Credit Losses

The following accounting policies apply to debt securities, loans and allowance for credit losses. Differences resulting from adoption of ASC 326 are also indicated.

Investments in Debt Securities

Debt securities that the Bank may not hold until maturity are classified as securities available-for-sale and reported at fair value. Beginning January 1, 2020, unrealized losses resulting from credit losses for available-for-sale debt securities are recognized in earnings as a provision for credit losses. Unrealized losses that do not result from credit losses are excluded from earnings and reported as accumulated other comprehensive income, net of applicable taxes, which is included in equity. Prior to January 1, 2020, all unrealized gains and losses, net of applicable taxes, were excluded from earnings and reported as accumulated other comprehensive income.

Debt securities that the Bank has the intent and ability to hold to maturity are classified as held-to-maturity and reported at amortized cost, excluding interest receivable. Interest receivable is separated from other components of amortized cost and presented within “Other assets” on the consolidated balance sheet.

Premiums and discounts are amortized or accreted over the contractual life of the security as an adjustment to the yield using the interest method. Premiums on callable debt securities are amortized to the earliest call date. For certain types of securities, prepayments are considered in determining the effective yield of the individual security. Unrealized and realized gains and losses on investment securities are determined based on the cost basis of securities specifically identified.

A debt security is considered past due if the required principal and interest payment has not been received as of the day after such payment was due. Debt securities are placed on nonaccrual status when there has been a missed payment of principal or interest, or earlier, if management determines that full collection of principal or interest is not expected. The Bank may return a debt security to accrual status when its principal and interest payments are current, a satisfactory payment history is established, and the Bank expects repayment of the remaining contractual principal and interest. The Bank promptly charges off balances of debt securities that are deemed uncollectible.

When a debt security is placed on nonaccrual status, the Bank reverses interest receivable against interest income. Since the nonaccrual policy results in a timely reversal of interest receivable, the Bank does not record an allowance for credit losses on interest receivable.

Allowance for Credit Losses for Investments in Debt Securities

Beginning January 1, 2020, the Bank evaluates available-for-sale debt securities that experienced a decline in fair value below amortized cost for credit impairment. The Bank recognizes a credit impairment if the Bank has the intent to sell the security, or it is more likely than not that the Bank will be required to sell the security before recovery of its amortized cost. If the Bank does not intend to nor would be required to sell the security prior to recovery of the amortized cost, the Bank evaluates whether a credit loss has occurred through its impairment framework, which includes both qualitative and quantitative factors. Beginning January 1, 2020, certain factors are no longer considered in determining whether a credit loss exists, including the length of time fair value has been less than amortized cost. Factors that the Bank considers include explicit or implicit guarantees by the Federal Government, external credit ratings, the extent of the loss, credit subordination, and industry, geographical, economic, political, or other factors that are relevant to the collectibility of the debt security. After considering these factors, if the present value of expected cash flows, discounted at the security’s effective yield, is lower than the security’s amortized cost, an allowance for credit losses is recognized.

Beginning January 1, 2020, the allowance for credit losses on held-to-maturity debt securities is based on the security’s amortized cost, excluding interest receivable, and represents the portion of the amortized cost that the

Bank does not expect to collect over the life of the security. The allowance for credit losses on held-to-maturity debt securities is initially recognized upon acquisition of the securities, and subsequently remeasured on a recurring basis.

Prior to January 1, 2020, for both available-for-sale and held-to-maturity debt securities that experienced a decline in fair value below amortized cost, the Bank recognized other-than-temporary impairment if the Bank (1) had the intent to sell the security, (2) it was more likely than not that the Bank would be required to sell the security before recovery of its amortized cost basis, or (3) the Bank did not expect to recover the entire amortized cost basis of the security.

Refer to Note 3, “Investment Securities and Allowance for Credit Losses,” for additional discussion of the allowance for credit losses for held-to-maturity and available-for-sale debt securities.

Loans

Loans are reported at amortized cost, which consists of their outstanding principal balances net of any charge-offs, unamortized deferred fees and costs on originated loans and premiums or discounts on purchased loans, excluding interest receivable. Interest receivable is separated from other components of amortized cost and presented within “Other assets” on the consolidated balance sheet.

Loan origination fees and direct loan origination costs are deferred and amortized as a yield adjustment over the contractual life of each loan using a level yield or straight-line methodology, depending upon the type of loan.

A loan is considered past due if the required principal and interest payment has not been received as of the day after such payment was due. Loans are placed on nonaccrual status when principal or interest payments are 90 days or more past due, except for single family loans that are well secured and in the process of collection, or earlier when management determines that collection of principal or interest is unlikely. The Bank may return a loan to accrual status when principal and interest payments are current, a satisfactory payment history is established and collectibility improves or the loan otherwise becomes well secured and is in the process of collection. The Bank promptly charges off loan balances that are deemed uncollectible.

When a loan is placed on nonaccrual status, the Bank reverses interest receivable against interest income and accounts for the loan on the cash or cost recovery method, until it qualifies for return to accrual status. Since the nonaccrual policy results in a timely reversal of interest receivable, the Bank does not record an allowance for credit losses on interest receivable.

Allowance for Credit Losses for Loans and Unfunded Loan Commitments

Beginning January 1, 2020, the allowance for credit losses for loans is measured on the loan’s amortized cost basis, excluding interest receivable, and represents the portion of the amortized cost that the Bank does not expect to collect over the life of the loan. The allowance for credit losses is initially recognized upon origination or purchase of the loans, and subsequently remeasured on a recurring basis.

Prior to January 1, 2020, the Bank followed ASC 450, “Contingencies,” for non-impaired loans and ASC 310-10-35, “Receivables—Subsequent Measurement,” for impaired loans to estimate its allowance for loan losses.

The Bank also records an allowance for credit losses on unfunded loan commitments, which is based on the same assumptions as funded loans and also considers the probability of funding. The allowance is recognized as a liability, and credit loss expense is recorded as provision for unfunded loan commitments within noninterest expense in the consolidated statements of income. Upon funding of the loan, any related allowance previously recorded on the unfunded amount is reversed and an allowance is subsequently recognized on the outstanding loan.

Refer to Note 4, “Loans and Allowance for Credit Losses,” for additional discussion of the allowance for credit losses on loans and unfunded loan commitments.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. Actual results could differ from these estimates. Material estimates subject to change include those related to allowance for credit losses, goodwill, identifiable intangible assets, fair value measurements, and income taxes.

The Bank's estimates for the quarter ended March 31, 2020 incorporate consideration of the impact of the COVID-19 pandemic (collectively referred to as "COVID-19" herein). Refer to Note 4, "Loans and Allowance for Credit Losses—Changes in the Allowance for Credit Losses," for additional discussion.

Recent Developments from COVID-19

The COVID-19 pandemic has created economic and financial disruptions globally and has led governmental authorities to take unprecedented measures to mitigate the spread of the disease, including travel bans, border closings, business closures, quarantines, social distancing and shelter-in-place orders, and to take actions designed to stabilize markets and promote economic growth.

Global health concerns relating to COVID-19 and preventive measures taken to reduce its spread have created significant volatility in the financial markets and impacted our customers and the global and local economies, which have resulted in legislative and regulatory action to assist those negatively impacted by the pandemic.

Loan Modifications

To alleviate borrowers who are experiencing financial difficulty as a result of COVID-19, the Bank has begun offering loan modifications to borrowers. Modifications generally include deferring scheduled principal and/or interest payments for six months. For certain loans, the maturity of the loan may also be extended. Interest continues to accrue, and the deferred payments will be reamortized over the current or extended maturity of the loan; in some cases, a portion of the deferred payments will be included in the borrower's final payment as a balloon payment.

On March 27, 2020, the U.S. Government enacted the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act") which, among other items, provides emergency assistance for individuals, families, and businesses affected by the 2020 pandemic caused by COVID-19. The CARES Act allows entities to elect to suspend the GAAP requirements for qualifying loan modifications that would otherwise be considered troubled debt restructurings for the period beginning March 1, 2020 and ending on the earlier of 1) 60 days after the end of the national emergency related to COVID-19 or 2) December 31, 2020. The Bank has elected this relief, and therefore, loan modifications made to borrowers impacted by COVID-19 who were current, or less than 30 days past due, as of December 31, 2019, will not be considered troubled debt restructurings. In addition, such loans will not be reported as nonaccrual. Further, short-term (e.g., six months) loan modifications made for borrowers who were current as of the modification date would also not be considered troubled debt restructurings based on guidance from federal banking regulators.

Refer to Note 19, "Subsequent Events," for more information about COVID-19 related loan modifications.

Note 2. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from the Federal Reserve Bank ("Federal Reserve") and commercial banks, and short-term investments such as federal funds sold or U.S. Treasury Bills with original maturity dates of ninety days or less. As of December 31, 2019, amounts due from the Federal Reserve include the minimum reserve balance the Bank is required to maintain. The Bank considers this reserve balance to be restricted. Effective in March 2020, the Federal Reserve eliminated the reserve requirement, therefore the Bank was not required to maintain a minimum cash balance at the Federal Reserve as of March 31, 2020.

The following table presents information related to cash and cash equivalents:

($ in thousands)	March 31, 2020	December 31, 2019
Cash and due from banks	$ 497,130	$ 361,932
Interest-bearing deposits with banks	3,452,248	1,337,625
Total cash and cash equivalents	$ 3,949,378	$ 1,699,557

Note 3. Investment Securities and Allowance for Credit Losses

The Bank adopted ASC 326 effective January 1, 2020. The new accounting standard requires recognition of an allowance for credit losses on held-to-maturity and available-for-sale debt securities and requires certain additional or revised disclosures for investments in debt securities and the related allowance for credit losses. Refer to Note 1, "Summary of Significant Accounting Policies," and the following disclosures for additional information.

The following table presents information related to available-for-sale debt securities:

	March 31, 2020				
($ in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Value
Debt securities available-for-sale:					
Agency residential mortgage-backed securities ("MBS")	$ 381,383	$ 12,051	$ (76)	$ —	$ 393,358
Other residential MBS	3,720	—	(425)	—	3,295
Agency commercial MBS	788,500	12,486	(1,287)	—	799,699
Securities of U.S. states and political subdivisions—taxable	47,286	160	—	—	47,446
Total	$ 1,220,889	$ 24,697	$ (1,788)	$ —	$ 1,243,798

The following table presents information related to held-to-maturity debt securities:

($ in thousands)	March 31, 2020				March 31, 2020	
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Allowance for Credit Losses	Amortized Cost, Net of Allowance
Debt securities held-to-maturity:						
U.S. Government-sponsored agency securities	$ 225,000	$ 1,010	$ —	$ 226,010	$ —	$ 225,000
Agency residential MBS	2,379,963	71,518	—	2,451,481	—	2,379,963
Agency commercial MBS	3,166,439	84,742	—	3,251,181	—	3,166,439
Securities of U.S. states and political subdivisions:						
Tax-exempt municipal securities	10,967,689	654,972	(11,075)	11,611,586	(4,704)	10,962,985
Tax-exempt nonprofit debentures	136,654	2,828	—	139,482	(232)	136,422
Taxable municipal securities	635,096	18,963	(2,884)	651,175	(141)	634,955
Corporate debt securities	24,079	315	—	24,394	(10)	24,069
Total	$ 17,534,920	$ 834,348	$ (13,959)	$ 18,355,309	$ (5,087)	$ 17,529,833

The following table presents information related to equity securities measured at fair value:

($ in thousands)	March 31, 2020
Equity securities (fair value):	
Mutual funds and marketable equity securities	$ 19,575

The following tables present information related to available-for-sale debt securities, held-to-maturity debt securities, and equity securities measured at fair value:

($ in thousands)	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities available-for-sale:				
Agency residential MBS	$ 367,671	$ 2,801	$ (146)	$ 370,326
Other residential MBS	4,152	90	(2)	4,240
Agency commercial MBS	857,754	3,337	(938)	860,153
Securities of U.S. states and political subdivisions—taxable	47,281	169	—	47,450
Total	$ 1,276,858	$ 6,397	$ (1,086)	$ 1,282,169
Debt securities held-to-maturity:				
U.S. Government-sponsored agency securities	$ 368,065	$ 100	$ (1,723)	$ 366,442
Agency residential MBS	2,224,252	10,601	(9,373)	2,225,480
Agency commercial MBS	3,296,724	35,430	(6,508)	3,325,646
Securities of U.S. states and political subdivisions:				
Tax-exempt municipal securities	10,483,668	589,526	(9,169)	11,064,025
Tax-exempt nonprofit debentures	138,140	2,777	—	140,917
Taxable municipal securities	612,704	13,466	(6,141)	620,029
Corporate debt securities	24,080	—	(675)	23,405
Total	$ 17,147,633	$ 651,900	$ (33,589)	$ 17,765,944

($ in thousands)	December 31, 2019
Equity securities (fair value):	
Mutual funds and marketable equity securities	$ 19,586

The components of amortized cost for debt securities on the consolidated balance sheet excludes interest receivable since the Bank elected to present interest receivable within "Other assets." The following table presents interest receivable on debt securities:

	March 31, 2020	
($ in thousands)	Debt securities available-for-sale	Debt securities held-to-maturity
Interest receivable	$ 2,458	$ 109,086

Credit Quality

The Bank uses external ratings from third party rating agencies, such as Standard & Poor's ("S&P") and Moody's Investors Service ("Moody's"), to determine the credit quality of each security at purchase and to monitor the credit quality of securities in the portfolio on an ongoing basis. For certain securities that do not have an external rating at the security level, an implied external rating is used. This includes securities explicitly or implicitly guaranteed by the Federal Government, securities that are pre-refunded by the issuer or securities that are rated at only the issuer level. For tax-exempt nonprofit debentures and certain tax exempt municipal securities that do not have an external or implied external rating, the security is internally graded and subsequently translated to a corresponding external rating. Rating changes and creditworthiness of all securities are reviewed at least on a quarterly basis. The ratings are described below, with the S&P rating first and the corresponding Moody's rating indicated parenthetically.

The credit quality indicators for the securities in the held-to-maturity portfolio range from the highest credit rating of AAA (Aaa) to BBB (Baa), which reflect the strong overall credit quality of the investment portfolio. All of the securities in the held-to-maturity portfolio are investment grade, given that none are rated below the BBB (Baa) category. The following are descriptions of each credit quality indicator:

- AAA (Aaa) rated securities are considered to be of the highest quality, and reflects the lowest level of credit risk of an obligor.
- AA (Aa) rated securities vary slightly from the AAA (Aaa) rated securities, but are still considered to be of very high quality, and reflect very low credit risk of an obligor.
- A (A) rated securities reflect low credit risk of an obligor, given the likelihood that such an obligor will be more impacted by an adverse economic environment than an AA (Aa) rated obligor.
- BBB (Baa) rated securities reflect moderate credit risk of an obligor, given that such an obligor is assumed to be more susceptible to an adverse economic environment than an A (A) rated obligor.

The following table presents the amortized cost of debt securities held-to-maturity by credit quality indicator:

($ in thousands)	March 31, 2020				
	AAA (Aaa)	**AA (Aa)**	**A (A)**	**BBB (Baa)**	**Total**
Debt securities held-to-maturity:					
U.S. Government-sponsored agency securities	$ —	$ 225,000	$ —	$ —	$ 225,000
Agency residential MBS	—	2,379,963	—	—	2,379,963
Agency commercial MBS	—	3,166,439	—	—	3,166,439
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	2,621,221	8,121,892	224,576	—	10,967,689
Tax-exempt nonprofit debentures	—	—	80,146	56,508	136,654
Taxable municipal securities	178,127	456,969	—	—	635,096
Corporate debt securities	—	24,079	—	—	24,079
Total	$ 2,799,348	$ 14,374,342	$ 304,722	$ 56,508	$ 17,534,920

The carrying value of held-to-maturity debt securities that were internally rated and translated to a corresponding external grade was $145.4 million at March 31, 2020, of which $136.6 million were tax-exempt nonprofit debentures and $8.8 million were tax-exempt municipal securities.

Aging and Nonaccrual

As of both March 31, 2020 and December 31, 2019, there were no debt securities past due or on nonaccrual status.

Allowance for Credit Losses

Debt Securities Held-to-Maturity

The Bank's held-to-maturity U.S. Government-sponsored agency securities, agency residential MBS, and agency commercial MBS are considered to not have expected credit losses due to the explicit or implicit guarantee by the Federal Government. Therefore, no allowance for credit losses has been recognized for these securities.

Held-to-maturity debt securities with similar risk characteristics are pooled when developing the allowance for credit losses. The Bank's allowance for credit losses for its held-to-maturity securities of U.S. states and political subdivisions (including tax-exempt municipal securities, tax-exempt nonprofit debentures and taxable municipal securities) is determined using a quantitative probability of default ("PD")/loss given default ("LGD") model to forecast credit losses. The Bank's estimate incorporates the security's characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of the securities. The PD/LGD model currently projects credit losses over a reasonable and supportable period of three years, followed by an immediate reversion to its historical loss rate for the remaining life of the security. On a quarterly or more frequent basis, the Bank's Economic Forecast Committee discusses and approves the macroeconomic forecast scenario used for the model and determines whether any changes to the reasonable and supportable period, as well as reversion period, are necessary.

During the three-year reasonable and supportable period, the PD model uses a rating-based transition matrix methodology that considers macroeconomic factors and issuer-level risk characteristics. The LGD model uses static industry level LGD rates segmented by industry sector of the underlying security. Estimated losses are calculated using the product of PD and LGD to produce a loss rate, which is multiplied by the security's amortized cost.

Subsequent to the reasonable and supportable period, the Bank reverts to its historical loss rate immediately. For the historical loss period, historical average one year probabilities of default by rating bucket are used together with static industry-average loss given default rates by industry sector to estimate losses for that period. Expected credit losses for the remaining life of the security are estimated by multiplying the historical loss rate by the security's amortized cost.

The Bank's allowance for credit losses for corporate debt securities is based on, among other factors, the financial condition of the issuer and structure of the security.

The increase in the allowance for credit losses on held-to-maturity debt securities during the quarter ended March 31, 2020 was primarily driven by new investment purchases during the quarter.

The following tables present the activity in the allowance for credit losses for held-to-maturity debt securities:

	Allowance for Credit Losses				
	Quarter Ended March 31, 2020				
($ in thousands)	Balance at Beginning of Period [1]	Provision	Charge-offs	Recoveries	Balance at End of Period
Debt securities held-to-maturity:					
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	$ 4,432	$ 272	$ —	$ —	$ 4,704
Tax-exempt nonprofit debentures	100	132	—	—	232
Taxable municipal securities	127	14	—	—	141
Corporate debt securities	10	—	—	—	10
Total	$ 4,669	$ 418	$ —	$ —	$ 5,087

[1] Represents the allowance for credit losses after the transition adjustments from the adoption of CECL.

Debt Securities Available-for-Sale

The following table presents gross unrealized losses and fair value of available-for-sale debt securities by length of time that individual securities in each category had been in a continuous loss position:

	March 31, 2020						
	Less than 12 months		12 months or more		Total		
($ in thousands)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Total Number of Securities
Debt securities available-for-sale:							
Agency residential MBS	$ (52)	$ 10,422	$ (24)	$ 2,356	$ (76)	$ 12,778	21
Other residential MBS	(425)	3,295	—	—	(425)	3,295	3
Agency commercial MBS	(735)	108,398	(552)	68,050	(1,287)	176,448	6
Total	$ (1,212)	$ 122,115	$ (576)	$ 70,406	$ (1,788)	$ 192,521	30

For available-for-sale debt securities that experienced a decline in fair value below amortized cost, the Bank concluded that it does not intend to nor would it be required to sell any of the securities prior to recovery of the amortized cost. The Bank then evaluated whether the decline in fair value resulted from a credit loss through its impairment assessment, described below.

Due to their explicit or implicit guarantee by the Federal Government, the Bank's agency residential MBS and agency commercial MBS have no expected credit losses. For all other available-for-sale debt securities, the Bank concluded that declines in fair value did not result from deteriorations in credit. The Bank expects to continue to receive all contractual principal and interest payments. Therefore, for the quarter ended March 31, 2020, there was no allowance for credit losses on available-for-sale debt securities.

Debt Securities Held-to-Maturity and Available-for-Sale as of December 31, 2019

The following table presents gross unrealized losses and fair value of available-for-sale and held-to-maturity debt securities by length of time that individual securities in each category had been in a continuous loss position:

	December 31, 2019						
	Less than 12 months		12 months or more		Total		
($ in thousands)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Total Number of Securities
Debt securities available-for-sale:							
Agency residential MBS	$ (2)	$ 861	$ (144)	$ 9,513	$ (146)	$ 10,374	17
Other residential MBS	(2)	471	—	—	(2)	471	2
Agency commercial MBS	(504)	132,158	(434)	68,908	(938)	201,066	7
Total	$ (508)	$ 133,490	$ (578)	$ 78,421	$ (1,086)	$ 211,911	26
Debt securities held-to-maturity:							
U.S. Government-sponsored agency securities	$ (1,723)	$ 298,249	$ —	$ —	$ (1,723)	$ 298,249	6
Agency residential MBS	(1,330)	318,478	(8,043)	767,121	(9,373)	1,085,599	24
Agency commercial MBS	(950)	550,395	(5,558)	455,461	(6,508)	1,005,856	25
Securities of U.S. states and political subdivisions:							
Tax-exempt municipal securities	(9,169)	1,168,483	—	—	(9,169)	1,168,483	126
Taxable municipal securities	(6,141)	378,768	—	—	(6,141)	378,768	44
Corporate debt securities	(675)	23,405	—	—	(675)	23,405	4
Total	$ (19,988)	$ 2,737,778	$ (13,601)	$ 1,222,582	$ (33,589)	$ 3,960,360	229

The Bank's assessment to determine whether debt securities available-for-sale and held-to-maturity are other-than-temporarily impaired considered, among other factors, the nature of the securities, credit ratings or financial condition of the issuer, the extent and duration of the unrealized loss, expected cash flows, market conditions and the Bank's ability to hold the securities through the anticipated recovery period. As of December 31, 2019, there were no other-than-temporary impairment charges on debt securities recognized in accumulated other comprehensive income. In addition, there were no other-than-temporary impairment charges on debt securities recognized in earnings during the quarter ended March 31, 2019.

Other Disclosures

The Bank pledges investment securities at the Federal Reserve to maintain the ability to borrow at the discount window, or at a correspondent bank as collateral to secure trust funds and public deposits. At March 31, 2020, the carrying value of investment securities pledged was $4.56 billion, of which $4.54 billion was unencumbered and available to support additional borrowings.

During the quarter ended March 31, 2020, the Bank sold tax-exempt municipal securities from the held-to-maturity portfolio with a carrying value of $32.1 million. The sale of the securities was in response to evidence of deterioration in creditworthiness of a specific issuer as a result of potential liabilities related to impacts of wildfire.

The following table presents proceeds received from sales of debt securities:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Debt securities available-for-sale:		
Sales proceeds	$ 70,868	$ 76,411
Debt securities held-to-maturity:		
Sales proceeds	$ 34,822	$ —

The following table presents gains and losses on investment securities:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Debt securities available-for-sale:		
Gross realized gains on sales	$ 37	$ —
Gross realized losses on sales	(151)	(816)
Debt securities held-to-maturity:		
Gross realized gains on sales	2,753	—
Equity securities (fair value):		
Net change in fair value	(11)	667
Total gain (loss) on investment securities	$ 2,628	$ (149)

The following table presents interest income on investment securities:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Interest income on tax-exempt securities	$ 93,046	$ 74,856
Interest income on taxable securities	55,523	58,909
Total	$ 148,569	$ 133,765

Contractual Maturities

The following tables present contractual maturities of debt securities available-for-sale and held-to-maturity. Actual maturities for certain U.S. Government agency securities, U.S. Government-sponsored agency securities and municipal securities may occur earlier than their stated contractual maturities because the note issuers may have the right to call outstanding amounts ahead of their contractual maturities. In addition, the remaining contractual principal maturities for MBS do not consider prepayments. Expected remaining maturities for MBS can differ from contractual maturities because borrowers have the right to prepay their mortgage obligations, with or without penalties, prior to contractual maturity.

($ in thousands)	Available-for-sale Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At March 31, 2020					
Amortized cost:					
Agency residential MBS	$ 381,383	$ 957	$ 1,553	$ 564	$ 378,309
Other residential MBS	3,720	—	—	—	3,720
Agency commercial MBS	788,500	883	153,648	23,204	610,765
Securities of U.S. states and political subdivisions—taxable	47,286	—	—	—	47,286
Total	$ 1,220,889	$ 1,840	$ 155,201	$ 23,768	$ 1,040,080
Fair value:					
Agency residential MBS	$ 393,358	$ 956	$ 1,536	$ 561	$ 390,305
Other residential MBS	3,295	—	—	—	3,295
Agency commercial MBS	799,699	881	152,579	22,988	623,251
Securities of U.S. states and political subdivisions—taxable	47,446	—	—	—	47,446
Total	$ 1,243,798	$ 1,837	$ 154,115	$ 23,549	$ 1,064,297

($ in thousands)	Held-to-maturity Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At March 31, 2020					
Amortized cost, net of allowance:					
U.S. Government-sponsored agency securities	$ 225,000	$ —	$ —	$ 25,000	$ 200,000
Agency residential MBS	2,379,963	—	—	3,726	2,376,237
Agency commercial MBS	3,166,439	—	—	—	3,166,439
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	10,962,985	258,836	547,040	137,815	10,019,294
Tax-exempt nonprofit debentures	136,422	—	—	—	136,422
Taxable municipal securities	634,955	—	—	—	634,955
Corporate debt securities	24,069	—	—	—	24,069
Total	$ 17,529,833	$ 258,836	$ 547,040	$ 166,541	$ 16,557,416

($ in thousands)	December 31, 2019 Amortized Cost	Fair Value
Available-for-sale:		
Due in one year or less	$ 1,142	$ 1,144
Due after one year through five years	167,016	166,246
Due after five years through ten years	26,359	26,326
Due after ten years	1,082,341	1,088,453
Total	$ 1,276,858	$ 1,282,169
Held-to-maturity:		
Due in one year or less	$ 314,975	$ 320,051
Due after one year through five years	469,078	513,497
Due after five years through ten years	352,166	370,660
Due after ten years	16,011,414	16,561,736
Total	$ 17,147,633	$ 17,765,944

Note 4. Loans and Allowance for Credit Losses

The Bank adopted ASC 326 effective January 1, 2020. The new accounting standard changes the methodology for determining the allowance for credit losses on loans held for investment and requires certain additional or revised disclosures for loans and the related allowance for credit losses. Refer to Note 1, "Summary of Significant Accounting Policies," and the following disclosures for additional information.

Loan Profile

The Bank's portfolio segments consist of residential real estate, income property, business and other loans. Each segment is further disaggregated by classes. The following table presents the Bank's loans held for investment by portfolio segment and class, and the allowance for credit losses:

($ in thousands)	March 31, 2020	December 31, 2019 [1]
Residential real estate		
Single family (1-4 units)	$ 49,063,193	$ 47,985,651
Home equity lines of credit	2,703,919	2,501,432
Single family construction	779,239	761,589
Total residential real estate	52,546,351	51,248,672
Income property		
Multifamily (5+ units)	12,823,392	12,353,359
Commercial real estate	7,715,266	7,449,058
Multifamily/commercial construction	1,839,445	1,695,954
Total income property	22,378,103	21,498,371
Business		
Capital call lines of credit	7,512,231	5,570,322
Tax-exempt	3,087,751	3,042,193
Other business	3,094,922	3,034,301
Total business	13,694,904	11,646,816
Other		
Stock secured	1,919,971	1,897,511
Other secured	1,531,705	1,433,399
Unsecured	3,214,028	3,072,062
Total other	6,665,704	6,402,972
Total loans held for investment	95,285,062	90,796,831
Less: Allowance for credit losses	(541,906)	(496,104)
Loans, net	$ 94,743,156	$ 90,300,727

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The following table presents the Bank's loans held for sale:

($ in thousands)	March 31, 2020	December 31, 2019
Loans held for sale	$ 354,873	$ 23,304

Beginning in April 2020, the Bank became a lender under the U.S. Small Business Administration's Paycheck Protection Program.

Real estate loans are secured by single family, multifamily and commercial real estate properties and generally mature over periods of up to thirty years. At March 31, 2020 and December 31, 2019, approximately 50% and 51%, respectively, of the total loan portfolio was secured by California real estate. At both March 31, 2020 and December 31, 2019, approximately 66% of single family mortgages fully and evenly amortize until maturity following an initial interest-only period of generally ten years.

As of March 31, 2020, the Bank had pledged $45.8 billion of loans to secure borrowings of $16.3 billion from the Federal Home Loan Bank (the "FHLB"), although only approximately $19.8 billion of collateral was required in connection with the outstanding FHLB advances.

The components of amortized cost for loans on the consolidated balance sheet excludes interest receivable since the Bank elected to present interest receivable within "Other assets." The following table presents interest receivable on loans:

($ in thousands)	March 31, 2020
Interest receivable	$ 258,415

Aging and Nonaccrual

The following tables present an aging analysis of loans:

($ in thousands)	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Total Loans
At March 31, 2020						
Residential real estate						
Single family (1-4 units)	$ 20,698	$ 15,307	$ 17,682	$ 53,687	$ 49,009,506	$ 49,063,193
Home equity lines of credit	3,067	2,254	2,071	7,392	2,696,527	2,703,919
Single family construction	8,753	—	—	8,753	770,486	779,239
Total residential real estate	32,518	17,561	19,753	69,832	52,476,519	52,546,351
Income property						
Multifamily (5+ units)	—	—	—	—	12,823,392	12,823,392
Commercial real estate	—	—	—	—	7,715,266	7,715,266
Multifamily/commercial construction	2,417	—	—	2,417	1,837,028	1,839,445
Total income property	2,417	—	—	2,417	22,375,686	22,378,103
Business						
Capital call lines of credit	1,461	—	—	1,461	7,510,770	7,512,231
Tax-exempt	—	—	—	—	3,087,751	3,087,751
Other business	2,206	—	453	2,659	3,092,263	3,094,922
Total business	3,667	—	453	4,120	13,690,784	13,694,904
Other						
Stock secured	—	—	252	252	1,919,719	1,919,971
Other secured	2,683	—	23	2,706	1,528,999	1,531,705
Unsecured	13,939	550	—	14,489	3,199,539	3,214,028
Total other	16,622	550	275	17,447	6,648,257	6,665,704
Total	$ 55,224	$ 18,111	$ 20,481	$ 93,816	$ 95,191,246	$ 95,285,062

($ in thousands)	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Total Loans
At December 31, 2019 [1]						
Residential real estate						
Single family (1-4 units)	$ 29,257	$ 3,630	$ 7,693	$ 40,580	$ 47,945,071	$ 47,985,651
Home equity lines of credit	1,037	479	2,853	4,369	2,497,063	2,501,432
Single family construction	—	—	—	—	761,589	761,589
Total residential real estate	30,294	4,109	10,546	44,949	51,203,723	51,248,672
Income property						
Multifamily (5+ units)	—	—	—	—	12,353,359	12,353,359
Commercial real estate	—	—	—	—	7,449,058	7,449,058
Multifamily/commercial construction	—	—	—	—	1,695,954	1,695,954
Total income property	—	—	—	—	21,498,371	21,498,371
Business						
Capital call lines of credit	—	—	—	—	5,570,322	5,570,322
Tax-exempt	—	—	—	—	3,042,193	3,042,193
Other business	252	22	953	1,227	3,033,074	3,034,301
Total business	252	22	953	1,227	11,645,589	11,646,816
Other						
Stock secured	—	252	—	252	1,897,259	1,897,511
Other secured	—	—	22	22	1,433,377	1,433,399
Unsecured	600	249	—	849	3,071,213	3,072,062
Total other	600	501	22	1,123	6,401,849	6,402,972
Total	$ 31,146	$ 4,632	$ 11,521	$ 47,299	$ 90,749,532	$ 90,796,831

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The table below presents information on loans 90 days or more past due and accruing and loans on nonaccrual status. Nonaccrual loans at March 31, 2020 include one lending relationship totaling $61.9 million, consisting of single family and non-owner occupied single family construction loans.

	March 31, 2020			December 31, 2019 [1]	
		Nonaccrual			
($ in thousands)	90 Days or More Past Due and Accruing	Total	Total Without an Allowance	90 Days or More Past Due and Accruing	Nonaccrual
Residential real estate					
Single family (1-4 units)	$ —	$ 54,189	$ 47,032	$ —	$ 59,013
Home equity lines of credit	—	9,833	7,453	—	11,158
Total residential real estate	—	64,022	54,485	—	70,171
Income property					
Multifamily/commercial construction	—	57,881	57,881	—	68,856
Business					
Other business	—	2,198	1,155	—	2,721
Other					
Stock secured	—	252	252	—	—
Other secured	—	23	—	—	23
Unsecured	—	1,042	193	—	1,410
Total other	—	1,317	445	—	1,433
Total	$ —	$125,418	$ 113,966	$ —	$ 143,181

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The interest income that would have been recognized related to nonaccrual loans at each respective period end is presented in the following table:

	Quarter Ended March 31,	
($ in thousands)	2020	2019
Actual interest income recognized	$ —	$ —
Interest income under original terms	$ 1,263	$ 662

Credit Quality

The Bank’s primary credit quality indicator for loans is its internal loan risk grades. The Bank maintains a loan risk grading system that takes into consideration regulatory guidelines and incorporates a number of considerations, such as a borrower’s financial condition, adequacy of collateral, and other factors that may impact a borrower’s ability to repay the loan. The Bank’s internal loan grades apply to all loans and are as follows:

Pass—These loans are performing substantially as agreed, with no current identified material weakness in repayment ability. Any credit or collateral exceptions existing with respect to the loan should be minimal and immaterial, in the process of correction, and not such that they could subsequently impair credit quality and introduce risk of collection.

Special Mention—These loans have potential weaknesses and deserve management’s close attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the loan or of the Bank’s credit position at some future date. However, these loans do not expose the Bank to sufficient risk to warrant adverse classification.

Substandard—These loans are inadequately protected by the current worth and paying capacity of the obligor or of the collateral pledged, if any. These loans have a well-defined weakness that jeopardizes the liquidation of the debt.

Doubtful—These loans have weaknesses that make collection or liquidation in full highly improbable. The possibility of some loss is extremely high, but because of certain important and reasonable specific pending factors that may work to the advantage and strengthening of the loan, its classification as a loss is deferred until a more exact status may be determined.

The majority of the Bank's loan portfolio is secured by real estate. A decline in real estate values can negatively impact our ability to recover our investment should the borrower become delinquent. We safeguard against this risk by rarely exceeding a loan-to-value ratio of 80% with respect to real estate lending.

We perform regular monitoring and annual reviews of our loan portfolio to identify and evaluate any deterioration in primary and/or secondary sources of repayment, including evaluations of the borrower's financial condition and value of the collateral. Annual reviews of residential real estate and other loans include an analysis of payment history, collateral value and credit scores. Annual reviews of our larger income property and business loans include analysis of financial statements of the property and/or borrower to determine the current ability to repay outstanding obligations. Updates to risk grades are made, as needed, upon completion of reviews. We maintain a list of loans that receive additional attention if we believe there may be a potential credit risk.

For loans that are criticized or classified, the Bank's Special Assets Committee reviews loan grades, reserves and accrual status on a quarterly or more frequent basis. This review includes an evaluation of the market conditions, the property's trends, the borrower and guarantor status, the level of reserves required and loan accrual status.

Additionally, we have an independent, third-party review performed on our loan grades and our credit administration functions each year. The results of the third-party review are presented to the Audit Committee of the Board of Directors. These asset review procedures provide management with additional information for assessing and affirming our asset quality.

Other Real Estate Owned and Residential Mortgage Loans in the Process of Foreclosure

As of March 31, 2020, the Bank had $1.1 million of residential real estate owned (acquired through foreclosure), compared to none as of December 31, 2019.

The carrying amount of residential mortgage loans in the process of foreclosure was $7.4 million and $7.1 million at March 31, 2020 and December 31, 2019, respectively.

Vintage

The following table presents loan balances by credit quality indicator and vintage year of origination or the year of modification if such modifications meets the criteria to be considered a new loan under ASC 310-20, "Nonrefundable Fees and Other Costs." For revolving lines of credit that converted to term loans, if the conversion involved a credit decision, such loans are included in the origination year in which the credit decision was made. If revolving lines of credit converted to term loans without a credit decision, such lines of credit are included in the "Revolving lines of credit converted to term" column in the following table.

($ in thousands)	2020	2019	2018	2017	2016 and Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At March 31, 2020								
Residential real estate								
Single family (1-4 units):								
Pass	$ 3,468,603	$ 14,897,778	$ 8,354,452	$ 8,459,091	$ 13,747,224	$ —	$ —	$ 48,927,148
Special mention	—	—	1,106	3,940	22,291	—	—	27,337
Substandard	1,685	8,506	5,426	10,229	82,862	—	—	108,708
	3,470,288	14,906,284	8,360,984	8,473,260	13,852,377	—	—	49,063,193
Home equity lines of credit:								
Pass	—	—	—	—	—	2,615,336	61,292	2,676,628
Special mention	—	—	—	—	—	10,056	53	10,109
Substandard	—	—	—	—	—	12,840	4,342	17,182
	—	—	—	—	—	2,638,232	65,687	2,703,919
Single family construction:								
Pass	38,535	254,629	253,071	159,040	65,211	—	—	770,486
Substandard	—	—	—	—	8,753	—	—	8,753
	38,535	254,629	253,071	159,040	73,964	—	—	779,239
Total residential real estate	3,508,823	15,160,913	8,614,055	8,632,300	13,926,341	2,638,232	65,687	52,546,351
Income property								
Multifamily (5+ units):								
Pass	1,053,147	3,410,966	2,985,475	1,974,464	3,246,174	153,166	—	12,823,392
Commercial real estate:								
Pass	499,538	1,622,515	1,308,999	983,391	3,092,055	202,309	—	7,708,807
Special mention	428	—	2,149	—	3,882	—	—	6,459
	499,966	1,622,515	1,311,148	983,391	3,095,937	202,309	—	7,715,266
Multifamily/commercial construction								
Pass	150,390	701,504	638,031	233,676	45,110	12,854	—	1,781,565
Substandard	—	57,880	—	—	—	—	—	57,880
	150,390	759,384	638,031	233,676	45,110	12,854	—	1,839,445
Total income property	1,703,503	5,792,865	4,934,654	3,191,531	6,387,221	368,329	—	22,378,103

(continued on following page)

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($ in thousands)	2020	2019	2018	2017	2016 and Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At March 31, 2020								
Business								
Capital call lines of credit:								
Pass	—	61,587	124,774	16,966	28,936	7,279,968	—	7,512,231
Tax-exempt:								
Pass	103,536	127,193	206,155	587,580	2,044,828	—	—	3,069,292
Special mention	—	—	—	—	9,866	—	—	9,866
Substandard	—	—	—	—	8,593	—	—	8,593
	103,536	127,193	206,155	587,580	2,063,287	—	—	3,087,751
Other business:								
Pass	250,395	616,301	433,938	315,262	516,224	937,273	—	3,069,393
Special mention	—	11,685	—	832	396	5,858	—	18,771
Substandard	1,283	1,155	131	1,726	865	1,102	—	6,262
Doubtful	—	92	—	—	305	99	—	496
	251,678	629,233	434,069	317,820	517,790	944,332	—	3,094,922
Total business	355,214	818,013	764,998	922,366	2,610,013	8,224,300	—	13,694,904
Other								
Stock secured:								
Pass	1,004	1,512	30,383	2,196	167	1,884,457	—	1,919,719
Substandard	—	—	—	—	—	252	—	252
	1,004	1,512	30,383	2,196	167	1,884,709	—	1,919,971
Other secured:								
Pass	93,104	203,807	159,018	147,211	107,501	801,871	16,876	1,529,388
Special mention	—	—	—	—	—	250	—	250
Substandard	—	—	—	—	—	—	2,044	2,044
Doubtful	—	—	—	—	23	—	—	23
	93,104	203,807	159,018	147,211	107,524	802,121	18,920	1,531,705
Unsecured:								
Pass	251,620	827,955	778,829	473,831	442,002	429,075	—	3,203,312
Special mention	—	208	—	49	—	1,217	—	1,474
Substandard	34	342	3,054	1,027	3,081	855	—	8,393
Doubtful	—	370	—	—	479	—	—	849
	251,654	828,875	781,883	474,907	445,562	431,147	—	3,214,028
Total other	345,762	1,034,194	971,284	624,314	553,253	3,117,977	18,920	6,665,704
Total	$ 5,913,302	$ 22,805,985	$ 15,284,991	$ 13,370,511	$ 23,476,828	$ 14,348,838	$ 84,607	$ 95,285,062

The following table presents loan balances by credit quality indicator:

($ in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At December 31, 2019 [(1)]					
Residential real estate					
Single family (1-4 units)	$ 47,830,280	$ 44,066	$ 111,305	$ —	$ 47,985,651
Home equity lines of credit	2,469,238	9,215	22,979	—	2,501,432
Single family construction	749,420	3,413	8,756	—	761,589
Total residential real estate	51,048,938	56,694	143,040	—	51,248,672
Income property					
Multifamily (5+ units)	12,353,359	—	—	—	12,353,359
Commercial real estate	7,440,460	4,687	3,911	—	7,449,058
Multifamily/commercial construction	1,627,098	—	68,856	—	1,695,954
Total income property	21,420,917	4,687	72,767	—	21,498,371
Business					
Capital call lines of credit	5,570,322	—	—	—	5,570,322
Tax-exempt	3,033,534	—	8,659	—	3,042,193
Other business	3,006,382	18,906	8,547	466	3,034,301
Total business	11,610,238	18,906	17,206	466	11,646,816
Other					
Stock secured	1,897,259	252	—	—	1,897,511
Other secured	1,431,082	250	2,044	23	1,433,399
Unsecured	3,061,106	1,563	8,180	1,213	3,072,062
Total other	6,389,447	2,065	10,224	1,236	6,402,972
Total	$ 90,469,540	$ 82,352	$ 243,237	$ 1,702	$ 90,796,831

[(1)] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The following table presents revolving lines of credit that converted to term loans without an additional credit decision during the period indicated:

($ in thousands)	Quarter Ended March 31, 2020
Residential real estate	
Home equity lines of credit	$ 8,325
Other	
Other secured	801
Total	$ 9,126

Allowance for Credit Losses for the Quarter Ended March 31, 2020

The Bank estimates its allowance for credit losses (“ACL”) using quantitative probability of default (“PD”)/loss given default (“LGD”) models, expert judgment, qualitative factors and individual assessments. The Bank’s estimate incorporates individual loan and/or property level characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of its loans. Loans with similar risk characteristics within each class are pooled when developing the allowance, and loans that do not share similar risk characteristics are individually assessed. The following is a discussion of the models, expert judgment and individual assessments the Bank uses to determine its ACL.

Quantitative PD/LGD Models

For residential real estate and income property loans, as well as tax-exempt business, other business, other secured and unsecured loans, expected credit losses are determined by PD/LGD models.

The PD/LGD models incorporate forward-looking macroeconomic information over a reasonable and supportable period of two years, and a reversion period of one year, after which the Bank reverts to its historical loss rate for the remaining life of the loan, while taking into account prepayment until the loan's maturity. The Bank currently uses a single macroeconomic scenario in forecasting expected credit losses. On a quarterly basis, the Bank's Economic Forecast Committee discusses and approves the macroeconomic forecast scenario used for these models and determines whether any changes to the reasonable and supportable period, as well as reversion period, are necessary.

During the reasonable and supportable period, the Bank uses PD/LGD models to estimate the likelihood that a loan will default and to measure the loss the Bank would incur if that loan defaults. The PD/LGD models determine estimated loss amounts based on the macroeconomic forecast scenario, prepayment (or repayment) projections and loan specific risk characteristics. Macroeconomic forecasts considered include various factors, but the most impactful to our loan portfolios are residential home price indices, commercial real estate price indices, and interest rates, which impacts prepayment (or repayment) estimates. Risk characteristics considered include loan-to-value ("LTV") ratios and credit scores for residential real estate, LTV and debt service coverage ratios for income property loans and tax-exempt business loans, risk grade and past due status for other business, other secured and unsecured loans. Estimated losses are calculated using the product of PD and LGD to produce a loss rate, which is multiplied by the loan's amortized cost.

Subsequent to the reasonable and supportable period, the Bank reverts to its historical loss rate linearly over the reversion period of one year. Expected credit losses are estimated by multiplying the loss rate during this reversion period by the loan's amortized cost.

After the reversion period, the Bank's historical loss rate is used to estimate expected credit losses for the remaining life of the loan by multiplying the historical loss rate by the loan's amortized cost. The historical loss rate is based on the average net charge-offs over a ten year historical period for all loans except tax-exempt business loans, which use a fifteen year historical period.

Expert Judgment

For capital call lines of credit and the majority of unsecured loans, expected credit losses are determined by expert judgment. The Bank uses expert judgment to estimate credit losses for these loan types because a quantitative PD/LGD model would not appropriately reflect the specific loan characteristics or other factors that could result in loan losses. Expected loan losses are based on credit attributes specific to each loan type. For capital call lines of credit, such attributes used to estimate a lifetime loss rate include loan size and distribution of commitment amounts. For unsecured loans, such attributes include external publicly available credit metrics for similar products, and weighted average monthly free cash flow at origination.

Qualitative Factors

The Bank also maintains a portion of the overall allowance that is comprised of adjustments to historical loss information for asset-specific risk characteristics and economic conditions. These adjustments are developed using a systematic methodology and are based on qualitative factors that are not reflected in the quantitative models or expert judgment, but are likely to cause estimated credit losses. The qualitative factors are evaluated on a portfolio by portfolio basis and are intended to address considerations including, but not limited to: the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, lending policies and procedures, and other external factors, such as competition and the legal and regulatory environment.

Individually Assessed Stock Secured Loans

The Bank applies the collateral maintenance practical expedient to estimate credit losses on its stock secured loan portfolio. Since the underlying collateral is required to be continually adjusted to maintain a fair value greater than or equal to the loan's amortized cost, no expected credit losses are recognized unless the fair value of the collateral is less than the amortized cost of the loan. Expected credit losses are measured at the individual loan level on the excess of amortized cost over the fair value of the collateral.

Other Individually Assessed Loans

Loans that do not share similar risk characteristics with the other loans in their class are not pooled, but are individually assessed. Nonaccrual loans or loans modified in a troubled debt restructuring are generally individually assessed for expected credit losses. The following discussion describes the Bank's individually assessed loans.

Collateral Dependent Loans: The Bank considers loans (1) for which the repayment is expected to be provided substantially through the operation or sale of collateral and the borrower is experiencing financial difficulty, or (2) where foreclosure is probable to be collateral dependent. Expected credit losses are measured at the individual loan level. If the fair value of the collateral, net of selling costs, is less than the loan's amortized cost, the Bank recognizes expected credit losses in the amount of the difference. At March 31, 2020, the Bank's collateral dependent loans, which included single family loans, home equity lines of credit ("HELOCs"), non-owner occupied single family construction loans, and unsecured loans, had an amortized cost of $102.9 million, with an associated total allowance of $175,000. Collateral dependent single family loans and HELOCs are secured by single family detached homes, condominiums, cooperative apartments and two-to-four unit properties. Non-owner occupied single family construction loans are secured by single family detached homes in construction. Collateral dependent business loans are secured by non-real estate assets such as partnership interests.

Troubled Debt Restructured Loans: The Bank grants concessions in troubled debt restructurings when a borrower is experiencing financial difficulties. Troubled debt restructured loans that are collateral dependent follow the assessment described under "Collateral Dependent Loans" above. For troubled debt restructured loans that are not collateral dependent, expected credit losses are measured at the individual loan level and are based on expected future cash flows. If the present value of expected future cash flows, discounted at the loan's effective interest rate, is less than the loan's amortized cost, the Bank recognizes expected credit losses in the amount of the difference.

Criticized or Classified Loans: For criticized or classified loans that are not collateral dependent nor troubled debt restructurings, expected credit losses are also individually assessed based on consideration of individual risk characteristics that affect the collectability of the loan but are not reflected in the quantitative model.

Changes in the Allowance for Credit Losses

The economic forecast scenario used in the quantitative models reflects a change in the economic forecast late in the first quarter of 2020 to reflect the pandemic conditions, which resulted in an increase in the allowance for credit losses during the quarter ended March 31, 2020. The increase was also driven by loan growth, including growth in business loans, as well as the change in certain qualitative factors driven primarily by pandemic conditions. There were no changes to the reasonable and supportable forecast period, the reversion period, or any methodology changes during the quarter ended March 31, 2020.

The following table presents the activity in the allowance for credit losses:

($ in thousands)	Allowance for Credit Losses — At or For the Quarter Ended March 31, 2020				
	Balance at Beginning of Period [(1)]	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period
Residential real estate					
Single family (1-4 units)	$ 101,532	$ 6,996	$ (89)	$ 17	$ 108,456
Home equity lines of credit	9,070	3,035	(6)	18	12,117
Single family construction	4,801	1,119	—	—	5,920
Total residential real estate	115,403	11,150	(95)	35	126,493
Income property					
Multifamily (5+ units)	111,384	(33)	—	—	111,351
Commercial real estate	55,413	3,634	—	—	59,047
Multifamily/commercial construction	23,884	6,134	—	—	30,018
Total income property	190,681	9,735	—	—	200,416
Business					
Capital call lines of credit	66,844	9,269	—	—	76,113
Tax-exempt	29,678	(212)	—	—	29,466
Other business	56,471	9,676	—	18	66,165
Total business	152,993	18,733	—	18	171,744
Other					
Stock secured	—	—	—	—	—
Other secured	3,399	887	—	—	4,286
Unsecured	31,953	7,174	(249)	89	38,967
Total other	35,352	8,061	(249)	89	43,253
Total	$ 494,429	$ 47,679	$ (344)	$ 142	$ 541,906

[(1)] Represents the allowance for credit losses after the transition adjustments from the adoption of CECL.

Allowance for Credit Losses for the Quarter Ended March 31, 2019

The following discussion relates to the Bank's allowance for credit losses methodology effective prior to January 1, 2020.

Non-impaired loans

Non-impaired loans are collectively evaluated for estimated losses in accordance with ASC 450, based on groups of loans with similar risk characteristics that align with the loan portfolio segments. The Bank has maintained a quantitative allowance for loan loss model that computes loss factors for each segment based upon our historical losses during the look-back period, which is subject to adjustments for certain portfolio segments, and current portfolio trends that reflect losses the Bank expects over its loss emergence period. Non-impaired loans are monitored to determine if these loans have experienced a deterioration in credit quality based upon their payment status and loan grade. If a deterioration in credit quality has occurred, the Bank evaluates the estimated loss content in the individual loan as compared to the loan's current carrying value.

Impaired loans

Nonaccrual loans with a balance greater than or equal to $1 million or loans modified in a troubled debt restructuring are generally considered impaired. Any non-impaired loans that subsequently became impaired are evaluated under ASC 310-10-35. If determined necessary, a specific reserve will be recorded for these loans. These loans are generally evaluated quarterly by the Bank's Special Assets Committee, unless they have been upgraded to a pass loan. If there is further credit deterioration, an additional specific reserve will be recorded.

The Bank measures impairment of a loan that is collateral dependent based on the fair value of the underlying collateral, net of selling costs. For a loan that is not collateral dependent, the Bank measures impairment using the present value of expected future cash flows, discounted at the instrument's effective interest rate. If the fair value of the collateral or the present value of expected future cash flows is less than the recorded investment in the loan, the Bank recognizes impairment by recording a charge-off or creating a valuation allowance.

Qualitative factors

The Bank also maintains a qualitative reserve based on management's assessments of the risks that may lead to a loan loss experience different than our historical loss experience and therefore not reflected in the quantitative model. The qualitative factors are intended to address developing external and internal environmental trends and include considerations such as changes in current economic and business conditions, the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, lending policies and procedures, and other external factors, such as competition and the legal and regulatory environment. The allocation to the individual loan portfolios considers the qualitative factors relevant to each portfolio, the degree to which the relevant qualitative factors impacted each loan portfolio, and relative portfolio balances.

The following table presents the activity in the allowance for credit losses, and related loan balances:

	At or for the Quarter Ended March 31, 2019					
	Allowance for Credit Losses [1]					
($ in thousands)	Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period	Loan Balance [1]
Residential real estate						
Single family (1-4 units)	$ 65,402	$ 2,513	$ (3)	$ 58	$ 67,970	$ 39,134,534
Home equity lines of credit	12,887	(32)	—	23	12,878	2,502,837
Single family construction	3,073	867	—	—	3,940	690,370
Total residential real estate	81,362	3,348	(3)	81	84,788	42,327,741
Income property						
Multifamily (5+ units)	79,640	4,756	—	—	84,396	10,755,208
Commercial real estate	54,604	877	—	—	55,481	6,763,665
Multifamily/commercial construction	15,484	2,482	—	—	17,966	1,604,997
Total income property	149,728	8,115	—	—	157,843	19,123,870
Business						
Capital call lines of credit	63,227	(1,293)	—	—	61,934	4,524,749
Tax-exempt	42,111	3,435	—	—	45,546	3,046,352
Other business	62,253	(1,140)	—	21	61,134	3,044,943
Total business	167,591	1,002	—	21	168,614	10,616,044
Other						
Stock secured	8,724	200	—	—	8,924	1,375,454
Other secured	8,301	138	—	—	8,439	1,135,170
Unsecured	23,342	1,397	(254)	28	24,513	2,686,818
Total other	40,367	1,735	(254)	28	41,876	5,197,442
Total	$ 439,048	$ 14,200	$ (257)	$ 130	$ 453,121	$ 77,265,097

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

Allowance for Credit Losses on Unfunded Loan Commitments

In determining the level of reserves for unfunded loan commitments, the Bank determines the probability of funding based on historical utilization statistics for unfunded loan commitments. Expected credit losses are determined based on the dollar amounts expected to fund, and the loss rates that are calculated using the same assumptions as the associated funded balance. For the quarter ended March 31, 2020, the loss rate represents expected credit losses over the life of the loans. For prior periods, the loss rate was based on an incurred historical loss factor. The allowance for credit losses on unfunded loan commitments was $30.0 million and $12.0 million at March 31, 2020 and December 31, 2019, respectively.

Impaired Loans

The following tables present information related to impaired loans:

	Total		With no related allowance recorded		With an allowance recorded		
($ in thousands)	**Recorded Investment**	**Unpaid Principal Balance**	**Recorded Investment**	**Unpaid Principal Balance**	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**
At December 31, 2019 [(1)]							
Single family (1-4 units)	$ 65,750	$ 65,815	$ 65,211	$ 65,276	$ 539	$ 539	$ 9
Home equity lines of credit	10,340	10,372	10,340	10,372	—	—	—
Multifamily (5+ units)	10,389	10,394	10,389	10,394	—	—	—
Commercial real estate	4,500	4,500	—	—	4,500	4,500	112
Multifamily/commercial construction	68,856	68,856	68,856	68,856	—	—	—
Other business	6,884	6,884	5,926	5,926	958	958	1
Unsecured	197	196	197	196	—	—	—
Total	$ 166,916	$ 167,017	$ 160,919	$ 161,020	$ 5,997	$ 5,997	$ 122

[(1)] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

	Quarter Ended March 31, 2019 [(1)]	
($ in thousands)	**Average Recorded Investment**	**Interest Income Recognized**
Single family (1-4 units)	$ 34,348	$ 126
Home equity lines of credit	11,387	69
Multifamily (5+ units)	12,359	126
Commercial real estate	6,480	69
Other business	9,899	31
Unsecured	625	7
Total	$ 75,098	$ 428

[(1)] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

Troubled Debt Restructurings

The Bank restructures loans generally because of the borrower's financial difficulties by granting concessions to reduce the interest rate or to defer payments. Loans that have been modified in troubled debt restructurings are generally reported as nonaccrual loans until at least six consecutive payments are received and the loan meets the Bank's other criteria for returning to accrual status. The following table presents loans modified in troubled debt restructurings:

	At March 31, 2020			At December 31, 2019 [1]		
($ in thousands)	Restructured - Nonaccrual	Restructured - Accruing	Total	Restructured - Nonaccrual	Restructured - Accruing	Total
Residential real estate						
Single family (1-4 units)	$ 17,961	$ 6,396	$ 24,357	$ 27,726	$ 6,441	$ 34,167
Home equity lines of credit	4,315	1,045	5,360	5,045	1,045	6,090
Total residential real estate	22,276	7,441	29,717	32,771	7,486	40,257
Income property						
Commercial real estate	—	4,711	4,711	—	4,712	4,712
Multifamily/commercial construction	57,881	—	57,881	68,856	—	68,856
Total income property	57,881	4,711	62,592	68,856	4,712	73,568
Business						
Other business	1,155	1,266	2,421	1,202	1,089	2,291
Total	$ 81,312	$ 13,418	$ 94,730	$ 102,829	$ 13,287	$ 116,116

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

During the quarters ended March 31, 2020 and 2019, troubled debt restructurings were primarily modified through payment deferrals, extensions of the maturity date or reductions in interest rate, both temporary and permanent. The following table presents loans modified in troubled debt restructurings during the periods indicated:

	Quarter Ended March 31,	
($ in thousands)	2020	2019 [1]
Residential real estate		
Single family (1-4 units)	$ 11,600	$ 4,910
Home equity lines of credit	2,706	—
Total residential real estate	14,306	4,910
Income property		
Multifamily/commercial construction	58,135	—
Total	$ 72,441	$ 4,910

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

Note 5. Mortgage Banking Activities

Mortgage servicing rights (“MSRs”) are reported at the lower of amortized cost or fair value. The recorded value of MSRs is amortized in proportion to, and over the period of, estimated net servicing income. The Bank values MSRs by stratifying loans by the year they are sold, by product type (fixed, hybrid or adjustable) and interest rate coupon range. Hybrid loans are further stratified by their initial fixed-rate period.

The following table presents information on the level of loans originated, loans sold and gain on sale of loans:

($ in thousands)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019
Total loans originated	$ 10,312,387	$ 6,476,803
Single family loans originated	$ 3,519,336	$ 2,189,895
Loans sold:		
Flow sales:		
Agency	$ 25,774	$ 11,679
Non-agency	31,870	16,831
Total flow sales	57,644	28,510
Bulk sales:		
Non-agency	437,669	152,119
Total loans sold	$ 495,313	$ 180,629
Gain on sale of loans:		
Amount	$ 1,925	$ 359
Gain as a percentage of loans sold	0.39 %	0.20 %

The following table presents changes in the portfolio of loans serviced for others and changes in the carrying value of the Bank’s MSRs and valuation statistics:

($ in thousands)	At or for the Quarter Ended March 31, 2020	At or for the Quarter Ended March 31, 2019
Loans serviced for others:		
Beginning balance	$ 9,297,972	$ 11,573,326
Loans sold	495,313	180,629
Repayments	(590,093)	(428,060)
Ending balance	$ 9,203,192	$ 11,325,895
MSRs:		
Beginning balance	$ 41,720	$ 54,470
Additions due to new loans sold	4,017	1,525
Amortization expense	(3,347)	(3,270)
Provision for valuation allowance	(650)	—
Ending balance	$ 41,740	$ 52,725
Estimated fair value of MSRs	$ 52,714	$ 91,876
MSRs as a percent of loans serviced	0.45 %	0.47 %
Weighted average servicing fee collected for the period (annualized)	0.25 %	0.25 %
MSRs as a multiple of weighted average servicing fee	1.83 x	1.90 x

The following table presents changes in the valuation allowance for MSRs:

	At or for the Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Valuation allowance:		
Beginning balance	$ 1,862	$ —
Provision	650	—
Write-down due to permanent impairment	(1,762)	—
Ending balance	$ 750	$ —

The following table presents loan servicing fees:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Contractually specified servicing fees	$ 5,649	$ 7,058
Late charges and ancillary fees, net of costs	$ (378)	$ (259)

The following table presents the Bank's key assumptions used in measuring the fair value of MSRs and the pre-tax sensitivity of the fair values to an immediate 10% and 20% adverse change in these assumptions:

($ in thousands)	**March 31, 2020**	**December 31, 2019**
Fair value of MSRs	$ 52,714	$ 57,891
Weighted average prepayment speed (CPR)	18.5 %	18.8 %
Impact on fair value of 10% adverse change	$ (3,409)	$ (3,343)
Impact on fair value of 20% adverse change	$ (6,529)	$ (6,399)
Weighted average discount rate	12.5 %	12.7 %
Impact on fair value of 10% adverse change	$ (1,660)	$ (1,899)
Impact on fair value of 20% adverse change	$ (3,220)	$ (3,678)

The sensitivity analysis above is hypothetical and should be used with caution. In particular, the effect of a variation in a particular assumption on the fair value of MSRs is calculated independent of changes in any other assumption; in practice, changes in one factor may result in changes in another factor, which may magnify or counteract the sensitivities. Further changes in fair value based on a single variation in assumptions generally cannot be extrapolated because the relationship of the change in a single assumption to the change in fair value may not be linear.

Refer to Note 8, "Goodwill and Intangible Assets," for disclosures of the gross carrying value, accumulated amortization, valuation allowance and estimated future amortization expense of MSRs.

Note 6. Variable Interest Entities

The Bank's involvement with variable interest entities ("VIEs") includes its interests in tax credit investments, other investments and securitizations. The Bank consolidates a VIE when it is the primary beneficiary. The Bank is the primary beneficiary if it has a controlling financial interest, which includes both the power to direct the activities that most significantly impact the VIE and a variable interest that could potentially be significant to the VIE.

The Bank has variable interests in low-income housing tax credit funds 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. Since the Bank is not the primary beneficiary of these investments, it does not consolidate these interests.

In addition, the Bank has variable interests in other investments, which are accounted for under the equity method. Since the Bank is not the primary beneficiary of these investments, it does not consolidate these investments.

The Bank has a variable interest related to its reimbursement obligation to the Federal Home Loan Mortgage Corporation ("Freddie Mac") for certain losses from the securitization of multifamily loans. Since the Bank is not the primary beneficiary of the VIE, it does not consolidate this interest.

The following table summarizes the assets and liabilities recorded on the Bank's balance sheet associated with transactions with VIEs:

	VIEs		
($ in thousands)	Not consolidated	Consolidated	Total
March 31, 2020			
Assets:			
Tax credit investments	$ 1,106,693	$ —	$ 1,106,693
Other investments	61,753	—	61,753
Total Assets	1,168,446	—	1,168,446
Liabilities:			
Reimbursement obligation	195	—	195
Unfunded commitments—tax credit investments	381,538	—	381,538
Unfunded commitments—other investments	20,833	—	20,833
Total Liabilities	402,566	—	402,566
Net Assets	$ 765,880	$ —	$ 765,880
December 31, 2019			
Assets:			
Tax credit investments	$ 1,100,509	$ —	$ 1,100,509
Other investments	61,579	—	61,579
Total Assets	1,162,088	—	1,162,088
Liabilities:			
Reimbursement obligation	254	—	254
Unfunded commitments—tax credit investments	374,004	—	374,004
Unfunded commitments—other investments	21,845	—	21,845
Total Liabilities	396,103	—	396,103
Net Assets	$ 765,985	$ —	$ 765,985

The Bank's exposure to loss with respect to VIEs that are not consolidated includes the Bank's investment in these assets of $1.2 billion at March 31, 2020 and December 31, 2019. The Bank's exposure to loss related to the reimbursement obligation is 12% of the multifamily loans securitized in 2018, or $30.2 million at both March 31, 2020 and December 31, 2019.

Note 7. Leases

The Bank primarily leases corporate, preferred banking and wealth management offices, as well as equipment. The Bank's lease terms range from 1 year to 19 years. The majority of our office leases include one or more options to extend the lease term, primarily up to 5 years at a time. The Bank includes renewal options when measuring the lease liability if it is reasonably certain to exercise the option during the lease term.

Operating lease expense for lease payments is recognized on a straight-line basis over the lease term. Some of the Bank's lease arrangements include rental payments that adjust periodically for inflation. These and other variable lease payments are expensed as incurred.

The following tables present information related to leases:

($ in thousands)	March 31, 2020	December 31, 2019
Supplemental balance sheet information:		
Lease assets [1]	$ 868,854	$ 787,464
Lease liabilities [2]	$ 895,771	$ 811,541

[1] Included in other assets on the consolidated balance sheets.
[2] Included in other liabilities on the consolidated balance sheets.

	Quarter Ended March 31,	
($ in thousands)	2020	2019
Components of lease cost:		
Operating lease cost [1]	$ 31,697	$ 25,659
Variable lease cost [1]	120	338
Total lease cost	$ 31,817	$ 25,997

[1] Included in occupancy expense on the consolidated statements of income and comprehensive income.

Note 8. Goodwill and Intangible Assets

The following table presents the Bank's intangible assets (excluding MSRs) and goodwill:

	March 31, 2020			December 31, 2019		
($ in thousands)	Gross Carrying Value	Accumulated Amortization	Carrying Value	Gross Carrying Value	Accumulated Amortization	Carrying Value
Intangible assets:						
Customer relationship intangibles	$ 133,100	$ (114,703)	$ 18,397	$ 133,100	$ (112,600)	$ 20,500
Core deposit intangibles	87,550	(87,478)	72	87,550	(87,297)	253
Trade name	42,900	—	42,900	42,900	—	42,900
Intangible assets	$ 263,550	$ (202,181)	61,369	$ 263,550	$ (199,897)	63,653
Goodwill			171,616			171,616
Total			$ 232,985			$ 235,269

Amortization of intangible assets (excluding MSRs) was $2.3 million for the quarter ended March 31, 2020 and $3.4 million for the quarter ended March 31, 2019.

The following table presents the Bank's MSRs:

	March 31, 2020				December 31, 2019			
($ in thousands)	**Gross Carrying Value**	**Accumulated Amortization**	**Valuation Allowance**	**Carrying Value**	**Gross Carrying Value**	**Accumulated Amortization**	**Valuation Allowance**	**Carrying Value**
MSRs [1]	$ 140,947	$ (98,457)	$ (750)	$ 41,740	$ 137,576	$ (93,994)	$ (1,862)	$ 41,720

[1] Amortization of MSRs is included in loan servicing fees, net on the consolidated statements of income and comprehensive income.

Refer to Note 5, "Mortgage Banking Activities," for further discussion on MSRs.

The following table presents goodwill by business segment:

($ in thousands)	**Commercial Banking**	**Wealth Management**	**Total**
Balance as of December 31, 2018	$ 51,435	$ 147,012	$ 198,447
Reduction due to Gradifi sale	(26,831)	—	(26,831)
Balance as of December 31, 2019 and March 31, 2020	$ 24,604	$ 147,012	$ 171,616

The following table presents the estimated future amortization for amortizable intangible assets as of March 31, 2020. The projections of amortization expense are based on existing asset balances as of March 31, 2020. Future amortization expense may vary from these projections.

($ in thousands)	**Customer relationship intangibles**	**Core deposit intangibles**	**MSRs**
April 1 - December 31, 2020	$ 5,400	$ 72	$ 8,437
2021	$ 5,527	$ —	$ 8,326
2022	$ 3,671	$ —	$ 5,994
2023	$ 2,235	$ —	$ 4,556
2024	$ 1,259	$ —	$ 3,462
2025	$ 305	$ —	$ 2,631

Note 9. Borrowings

The Bank uses FHLB advances primarily as a funding source for long-term debt, and, in certain cases, for short-term borrowings. Other sources of funding include federal funds purchased, senior notes and subordinated notes. Short-term borrowings have an original maturity of one year or less. Long-term debt has an original maturity in excess of one year. The following table presents the carrying values, interest expense and components of short-term borrowings and long-term debt:

	Carrying Values		Interest Expense Quarter Ended March 31,	
($ in thousands)	March 31, 2020	December 31, 2019	2020	2019
Short-term borrowings:				
Federal funds purchased	$ —	$ 450,000	$ 1,135	$ 60
FHLB advances	—	350,000	3,565	5,970
Total	—	800,000	4,700	6,030
Long-term debt:				
FHLB advances	16,250,000	12,200,000	66,566	43,167
Senior notes [1]	994,742	497,719	4,773	5,934
Subordinated notes [1]	777,990	777,885	9,105	9,101
Total	18,022,732	13,475,604	80,444	58,202
Total borrowings	$ 18,022,732	$ 14,275,604	$ 85,144	$ 64,232

[1] Carrying value represents the principal balance, net of unamortized issuance discounts and deferred issuance costs. Interest expense includes amortization of issuance discounts and deferred issuance costs, which are amortized over the contractual or estimated life using a level yield methodology.

FHLB Advances

FHLB advances may be either adjustable-rate in nature or fixed for a specific term. At March 31, 2020, the Bank had no short-term FHLB advances. At March 31, 2020, all of the long-term FHLB advances were fixed-rate for a specific term. At March 31, 2020, the contractual maturities and weighted average contractual rates of long-term FHLB advances were as follows:

($ in thousands)	March 31, 2020	
FHLB advances maturing in:	Amount	Rate
April 1 - December 31, 2020	$ 2,350,000	2.46 %
2021	8,800,000	1.76 %
2022	2,900,000	1.55 %
2023	525,000	1.04 %
2024	1,275,000	1.26 %
2025 and thereafter	400,000	1.24 %
Total	$ 16,250,000	1.75 %

In connection with outstanding FHLB advances, the Bank owned FHLB stock of $494.1 million and $367.9 million at March 31, 2020 and December 31, 2019, respectively. At March 31, 2020 and December 31, 2019, the Bank was required to own FHLB stock at least equal to 2.7% of outstanding FHLB advances.

Senior Notes and Subordinated Notes

The following table presents the carrying values, coupon rates, optional redemption dates and maturity dates of the Bank's unsecured, term, fixed-rate senior notes, fixed-to-floating rate senior notes, and fixed-rate subordinated notes as of March 31, 2020. In February 2020, the Bank completed an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes due 2024.

	March 31, 2020			
($ in thousands)	**Carrying Value [1]**	**Rate**	**Optional Redemption Date [2]**	**Maturity Date [3]**
Senior notes:				
Fixed-rate, issued June 2017	$ 497,947	2.500 %	May 6, 2022	June 6, 2022
Fixed-to-floating rate, issued February 2020	$ 496,795	1.912% [4]	February 12, 2023	February 12, 2024
Subordinated notes:				
Fixed-rate, issued August 2016	$ 388,098	4.375 %	February 1, 2046	August 1, 2046
Fixed-rate, issued February 2017	$ 389,892	4.625 %	August 13, 2046	February 13, 2047

[1] Principal balance, net of unamortized issuance discounts and deferred issuance costs.

[2] The Bank has the option to redeem these notes prior to their maturity at the dates specified.

[3] Unless previously redeemed, the notes will mature at the dates specified.

[4] Interest is paid at a fixed rate of 1.912% per annum from February 12, 2020 through February 12, 2023, and is paid based on a floating rate of Compounded Secured Overnight Funding Rate ("SOFR") plus 0.620% beginning February 12, 2023.

Note 10. Derivative Financial Instruments

In accordance with ASC 815, "Derivatives and Hedging," the Bank recognizes all derivatives on the balance sheet at fair value. The Bank has elected to present its derivative assets and derivative liabilities on a gross basis on its balance sheet. The Bank accounts for changes in the fair value of a derivative depending on the intended use of the derivative and its resulting designation under specified criteria. The Bank currently does not have any derivatives designated as hedging instruments.

The Bank has derivative assets and liabilities consisting of foreign exchange contracts executed with clients. In these transactions, the Bank offsets the client exposure with another financial institution counterparty, such as a major investment bank or a large commercial bank. The Bank does not retain significant foreign exchange risk. The Bank does retain credit risk, both to the client and the financial institution counterparty, which is evaluated and managed by the Bank in the normal course of its operations. In addition, the Bank has foreign exchange contracts associated with client deposits denominated in various foreign currencies. Management does not currently anticipate non-performance by any of the counterparties. The amounts presented in the table below include the foreign exchange contracts with both the client and the financial institution counterparties.

The Bank also creates derivative instruments when it enters into interest rate lock commitments for single family mortgage loans that will be sold to investors. The Bank's interest rate risk exposure to these commitments is not significant as these derivatives are economically hedged with forward commitments to sell the loans to investors.

The following table presents the total notional or contractual amounts and fair values of derivatives:

	March 31, 2020			December 31, 2019		
		Fair Value			Fair Value	
($ in thousands)	Notional or Contractual Amount	Derivative Assets [(1)]	Derivative Liabilities [(2)]	Notional or Contractual Amount	Derivative Assets [(1)]	Derivative Liabilities [(2)]
Foreign exchange contracts	$ 4,417,832	$ 30,152	$ 50,301	$ 4,360,407	$ 40,789	$ 27,040
Interest rate contracts with borrowers	$ 10,276	190	—	$ 10,061	6	5
Forward loan sale commitments	$ 363,459	42	232	$ 33,414	5	6
Total		$ 30,384	$ 50,533		$ 40,800	$ 27,051

(1) Included in other assets on the consolidated balance sheets.
(2) Included in other liabilities on the consolidated balance sheets.

The credit risk associated with these derivative instruments is the risk of non-performance by the counterparties to the contracts. The Bank's counterparty credit exposure is equal to the amount reported as a derivative asset on the Bank's balance sheet. To mitigate this risk, the Bank enters into master netting and bilateral collateral agreements with certain counterparties. These agreements allow the Bank to settle its derivative contracts with such counterparties on a net basis and to offset the net derivative exposure against the related collateral in the event of default.

The following table presents additional information related to the Bank's foreign exchange derivative contracts:

	Total	Contracts Not Subject to Master Netting Arrangements	Contracts Subject to Master Netting Arrangements					
						Gross Amounts Not Offset on the Balance Sheet		
($ in thousands)	Gross Amounts Recognized	Gross Amounts Recognized	Gross Amounts Recognized	Gross Amounts Offset on the Balance Sheet	Net Amounts Presented on the Balance Sheet	Derivative Amount	Cash Collateral [(1)]	Net Amount
March 31, 2020								
Derivative assets:								
Foreign exchange contracts	$ 30,152	$ 13,295	$ 16,857	$ —	$ 16,857	$ 16,857	$ —	$ —
Derivative liabilities:								
Foreign exchange contracts	$ 50,301	$ 13,501	$ 36,800	$ —	$ 36,800	$ 16,857	$ 18,620	$ 1,323
December 31, 2019								
Derivative assets:								
Foreign exchange contracts	$ 40,789	$ 18,840	$ 21,949	$ —	$ 21,949	$ 17,542	$ 4,407	$ —
Derivative liabilities:								
Foreign exchange contracts	$ 27,040	$ 9,498	$ 17,542	$ —	$ 17,542	$ 17,542	$ —	$ —

(1) Collateral presented in the table above is limited to the amount required to settle the net derivative position and does not include any excess collateral.

Note 11. Fair Value Measurements

The Bank uses fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Under ASC 820, "Fair Value Measurement," fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Debt securities available-for-sale and derivative instruments are recorded at fair value on a recurring basis. Additionally, from time to time, the Bank may be required to record other assets at fair value on a nonrecurring basis, which typically involve write-downs of individual assets or application of the lower-of-cost-or-market accounting. Nonrecurring fair value adjustments of loans represent a write-down based on the fair value of the underlying collateral of the loan, adjusted for certain factors such as estimated costs to sell and current market conditions. Nonrecurring fair value adjustments of loans held for sale, MSRs and other real estate owned result from the application of lower-of-cost-or-market accounting.

Although management uses its best judgment in estimating fair value, there are inherent weaknesses in any estimates that are made at a discrete point in time based on relevant market data, information about the financial instruments and other factors. Estimates of fair value of instruments without quoted market prices are subjective in nature and involve various assumptions that are matters of judgment. Changes in the assumptions used could significantly affect these estimates.

The estimated fair values presented neither include nor give effect to the values associated with the Bank's existing client relationships, lending and deposit office networks, or certain tax implications related to the realization of unrealized gains or losses.

Fair Value Hierarchy

Under ASC 820, the Bank groups its assets and liabilities at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

- Level 1—Valuation is based on quoted prices for identical instruments traded in active markets.
- Level 2—Valuation is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market.
- Level 3—Valuation is generated from model-based techniques that use significant assumptions not observable in the market. These unobservable assumptions reflect estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of option pricing models, discounted cash flow models and similar techniques.

It is the Bank's policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements, in accordance with the fair value hierarchy of ASC 820.

Recurring Fair Value Measurements

The following is a description of valuation methodologies used for assets and liabilities recorded at fair value on a recurring basis.

Available-for-sale debt securities: The Bank's U.S. Treasury securities are valued using quoted market prices from the active exchange on which the securities are traded. For most other debt securities, the Bank uses quoted prices obtained through third-party valuation sources. Valuation techniques are based on observable market inputs appropriate for the type of security being measured. In some instances, prices are obtained from dealer quotes. The fair value of tax-exempt nonprofit debentures and certain municipal securities is determined using estimated future cash flows or other model-based valuation methods using inputs similar to market pricing, adjusted for liquidity risk.

Equity securities measured at fair value: The Bank's mutual funds and marketable equity securities are valued using quoted market prices from the active exchange on which the securities are traded. Mutual funds are valued using the net asset value ("NAV") per share using quoted market prices.

Derivatives: Derivative assets and liabilities consist of foreign exchange contracts, interest rate lock commitments and forward loan sale commitments. The Bank uses current market prices to determine the fair value of foreign exchange contracts. The fair values of interest rate lock commitments and forward loan sale commitments are estimated using analysis based on current market prices.

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis:

($ in thousands)	Level 1	Level 2	Level 3	Total
March 31, 2020				
Assets:				
Debt securities available-for-sale:				
Agency residential MBS	$ —	$ 393,358	$ —	$ 393,358
Other residential MBS	—	3,295	—	3,295
Agency commercial MBS	—	799,699	—	799,699
Securities of U.S. states and political subdivisions—taxable	—	—	47,446	47,446
Equity securities (fair value):				
Mutual funds and marketable equity securities	19,575	—	—	19,575
Derivative assets	—	30,384	—	30,384
Total	$ 19,575	$ 1,226,736	$ 47,446	$ 1,293,757
Liabilities:				
Derivative liabilities	$ —	$ 50,533	$ —	$ 50,533
December 31, 2019				
Assets:				
Debt securities available-for-sale:				
Agency residential MBS	$ —	$ 370,326	$ —	$ 370,326
Other residential MBS	—	4,240	—	4,240
Agency commercial MBS	—	860,153	—	860,153
Securities of U.S. states and political subdivisions—taxable	—	—	47,450	47,450
Equity securities (fair value):				
Mutual funds and marketable equity securities	19,586	—	—	19,586
Derivative assets	—	40,800	—	40,800
Total	$ 19,586	$ 1,275,519	$ 47,450	$ 1,342,555
Liabilities:				
Derivative liabilities	$ —	$ 27,051	$ —	$ 27,051

There were no transfers in or out of Level 3 assets measured at fair value on a recurring basis in the quarters ended March 31, 2020 and 2019.

The following table presents changes in Level 3 assets measured at fair value on a recurring basis:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Available-for-sale debt securities of U.S. states and political subdivisions—taxable:		
Balance at beginning of period	$ 47,450	$ 47,448
Unrealized losses included in other comprehensive income (loss)	(10)	(1)
Accretion included in interest income	6	1
Balance at end of period	$ 47,446	$ 47,448

The table and discussion below provide information about the significant unobservable inputs in our recurring Level 3 fair value measurements:

($ in thousands)	Fair Value	Valuation Technique	Unobservable Input
March 31, 2020			
Available-for-sale debt securities of U.S. states and political subdivisions—taxable	$ 47,446	Discounted cash flow	Weighted average liquidity risk yield premium of 50 bps
December 31, 2019			
Available-for-sale debt securities of U.S. states and political subdivisions—taxable	$ 47,450	Discounted cash flow	Weighted average liquidity risk yield premium of 50 bps

For taxable municipal securities, the Bank calculates the fair value using estimated future cash flows on a quarterly basis. In addition to the inputs listed above, the Bank's management considers interest rate reset frequency, spread to index, market yield curves and the underlying bond rating at the time of valuation. The liquidity risk yield premium is applied to account for liquidity considerations since the bond is not publicly traded. An unfavorable change in the general business and credit environments could cause an increase in the liquidity risk yield premium, resulting in a decrease in the fair value of the investment.

Nonrecurring Fair Value Measurements

The following is a description of valuation methodologies used in estimating the fair value of assets measured at fair value on a nonrecurring basis.

Loans: The fair value of loans with nonrecurring fair value adjustments is based on the fair value of the underlying collateral, primarily real estate, adjusted for certain factors such as estimated costs to sell.

Loans held for sale: The fair value of loans held for sale is derived from actual prices at which loans were committed for sale adjusted for loan servicing value.

MSRs: The fair value of MSRs is based on a present value calculation of expected future cash flows, with assumptions regarding prepayments, discount rates, cost to service, escrow account earnings, contractual servicing fees and ancillary income.

Other real estate owned: Other real estate owned includes foreclosed properties securing mortgage loans. Fair value is generally based upon independent market prices or appraised values of the collateral, adjusted for estimated costs to sell.

The following table presents the assets measured at fair value on a nonrecurring basis that were held on the balance sheet at March 31, 2020 and December 31, 2019:

($ in thousands)	Level 1	Level 2	Level 3	Total
March 31, 2020				
Assets:				
Loans	$ —	$ —	$ 3,253	$ 3,253
MSRs	—	—	9,355	9,355
Total	$ —	$ —	$ 12,608	$ 12,608
December 31, 2019				
Assets:				
Loans	$ —	$ —	$ 3,353	$ 3,353
Loans held for sale	—	4,610	18,694	23,304
MSRs	—	—	8,364	8,364
Total	$ —	$ 4,610	$ 30,411	$ 35,021

The following table presents gains (losses) related to nonrecurring fair value measurements. The gains (losses) relate to assets held on the balance sheet at each respective period end.

	Quarter Ended March 31,	
($ in thousands)	2020	2019
Loans	$ 623	$ (3)
MSRs	(650)	—
Total	$ (27)	$ (3)

Fair Value of Financial Instruments

The following tables present the carrying values, estimated fair values and the levels in the fair value hierarchy of financial instruments, excluding those measured at fair value on a recurring basis:

	March 31, 2020				
	Carrying Amount	Fair Value			
($ in thousands)		Total	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 3,949,378	$ 3,949,378	$ 3,949,378	$ —	$ —
Debt securities held-to-maturity, net: [1]					
U.S. Government-sponsored agency securities	225,000	226,010	—	226,010	—
Agency residential MBS	2,379,963	2,451,481	—	2,451,481	—
Agency commercial MBS	3,166,439	3,251,181	—	3,251,181	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	10,962,985	11,611,586	—	11,521,568	90,018
Tax-exempt nonprofit debentures	136,422	139,482	—	—	139,482
Taxable municipal securities	634,955	651,175	—	651,175	—
Corporate debt securities	24,069	24,394	—	24,394	—
Loans, net: [1]					
Real estate secured mortgages	74,597,545	71,997,912	—	47,641,766	24,356,146
Other loans	20,145,611	18,542,534	—	—	18,542,534
Loans held for sale	354,873	355,916	—	355,916	—
MSRs	41,740	52,714	—	—	52,714
FHLB stock	494,100	494,100	—	—	494,100
Liabilities:					
Deposits:					
Certificates of deposit	$ 14,140,550	$ 14,232,798	$ —	$ —	$ 14,232,798
Borrowings:					
Long-term FHLB advances	16,250,000	16,499,956	—	16,499,956	—
Senior notes	994,742	971,950	—	971,950	—
Subordinated notes	777,990	878,172	—	878,172	—

[1] Carrying amount is presented net of allowance for credit losses.

($ in thousands)	December 31, 2019				
	Carrying Amount	Fair Value			
		Total	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 1,699,557	$ 1,699,557	$ 1,699,557	$ —	$ —
Debt securities held-to-maturity:					
U.S. Government-sponsored agency securities	368,065	366,442	—	366,442	—
Agency residential MBS	2,224,252	2,225,480	—	2,225,480	—
Agency commercial MBS	3,296,724	3,325,646	—	3,325,646	—
Securities of U.S. states and political					
Tax-exempt municipal securities	10,483,668	11,064,025	—	10,969,137	94,888
Tax-exempt nonprofit debentures	138,140	140,917	—	—	140,917
Taxable municipal securities	612,704	620,029	—	620,029	—
Corporate debt securities	24,080	23,405	—	23,405	—
Loans, net: [(1)]					
Real estate secured mortgages	72,469,094	70,723,276	—	47,016,483	23,706,793
Other loans	17,831,633	16,702,916	—	—	16,702,916
Loans held for sale	23,304	23,304	—	4,610	18,694
MSRs	41,720	57,891	—	—	57,891
FHLB stock	367,943	367,943	—	—	367,943
Liabilities:					
Deposits:					
Certificates of deposit	$ 13,935,060	$ 13,971,499	$ —	$ —	$ 13,971,499
Borrowings:					
Federal funds purchased	450,000	450,000	—	450,000	—
Short-term FHLB advances	350,000	350,000	—	350,000	—
Long-term FHLB advances	12,200,000	12,252,331	—	12,252,331	—
Senior notes	497,719	504,510	—	504,510	—
Subordinated notes	777,885	899,092	—	899,092	—

(1) Carrying amount is presented net of allowance for credit losses.

Note 12. Preferred Stock

At March 31, 2020, the Bank was authorized to issue 25,000,000 shares of preferred stock, par value $0.01 per share, of which 1,145,000 shares were issued and outstanding. Each share of preferred stock has a liquidation preference of $1,000. The following table presents the authorized, issued and outstanding shares for each series of the Bank's preferred stock:

(in thousands, except share amounts)	March 31, 2020	December 31, 2019
5.70% Noncumulative Perpetual Series F—115,000 shares authorized; 100,000 shares issued and outstanding	$ 100,000	$ 100,000
5.50% Noncumulative Perpetual Series G—172,500 shares authorized; 150,000 shares issued and outstanding	150,000	150,000
5.125% Noncumulative Perpetual Series H—200,000 shares authorized, issued and outstanding	200,000	200,000
5.50% Noncumulative Perpetual Series I—300,000 shares authorized, issued and outstanding	300,000	300,000
4.70% Noncumulative Perpetual Series J—400,000 shares authorized; 395,000 shares issued and outstanding	395,000	395,000
Total	$ 1,145,000	$ 1,145,000

Dividends on each series of the Bank's outstanding shares of preferred stock, except for the 4.70% Noncumulative Perpetual Series J Preferred Stock ("Series J Preferred Stock"), are paid each March 30, June 30, September 30 and December 30. Dividends on the Series J Preferred Stock are paid each January 30, April 30, July 30 and October 30. The following table presents dividends paid on preferred stock:

	Quarter Ended March 31,			
	2020		2019	
(in thousands, except per share amounts)	Total	Per Share	Total	Per Share
5.50% Noncumulative Perpetual Series D	$ —	$ —	$ 2,612	$ 13.75
5.70% Noncumulative Perpetual Series F	1,425	$ 14.25	1,425	$ 14.25
5.50% Noncumulative Perpetual Series G	2,063	$ 13.75	2,063	$ 13.75
5.125% Noncumulative Perpetual Series H	2,562	$ 12.81	2,562	$ 12.81
5.50% Noncumulative Perpetual Series I	4,125	$ 13.75	4,125	$ 13.75
4.70% Noncumulative Perpetual Series J	2,845	$ 7.20	—	$ —
Total	$ 13,020		$ 12,787	

Note 13. Common Stock and Stock Plans

Common Stock

At March 31, 2020, the Bank was authorized to issue 400,000,000 shares of common stock, par value $0.01 per share. At March 31, 2020, the Bank had 171,394,527 shares issued and outstanding. During the quarter ended March 31, 2020, the Bank sold 2,500,000 shares of common stock in an underwritten offering, which added $290.6 million to common equity.

First Republic Bank Employee Stock Purchase Plan

Under the Bank's Employee Stock Purchase Plan (the "Purchase Plan"), the Bank is authorized to sell 2,000,000 shares of common stock to its full-time and part-time employees who are regularly employed for 20 hours or more per week. Employees may purchase shares of the Bank's common stock at 85% of the closing price of the common stock on the New York Stock Exchange on the date of purchase or the nearest prior trading day, subject to an annual limitation of common stock valued at $25,000. For the quarter ended March 31, 2020, a total of 82,184 shares were sold to employees, and the compensation expense for the Purchase Plan was $1.2 million.

First Republic Bank 2017 Omnibus Award Plan

In May 2017, the Bank adopted the 2017 Omnibus Award Plan, which replaced the 2010 Omnibus Award Plan. Stock awards outstanding that were previously granted under the 2010 Omnibus Award Plan were not affected by the replacement and the terms of the 2010 Omnibus Award Plan will remain effective for such awards.

The Bank is authorized to grant shares of common stock in the form of stock options, stock appreciation rights, shares of restricted stock, restricted stock units or performance share units to its employees, officers and directors. Upon termination of service, unvested awards are generally forfeited. At March 31, 2020, the Bank had 814,303 shares reserved for future stock award grants.

Stock Options

At March 31, 2020, the Bank had stock options outstanding of 167,161. Generally, stock options vest over a period of up to four years from the grant date and have a maximum contractual life of ten years. Under the Bank's stock option agreements, the exercise price of each option equals the market price of the Bank's common stock at the grant date. Stock option exercises are satisfied by issuing shares from the Bank's authorized shares. The number of shares of common stock issued from stock option exercises is generally net of shares withheld to pay the exercise price or taxes due upon the exercise. As of March 31, 2020, all options are fully vested.

The following table presents information related to outstanding stock options:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value ($ in thousands)
Options outstanding as of December 31, 2019	319,753	$16.40		
Granted	—	—		
Canceled or forfeited	—	—		
Exercised	(152,592)	$15.31		
Options outstanding as of March 31, 2020	167,161	$17.39	0.5 years	$10,847

The intrinsic value of all options exercised was $14.4 million for the quarter ended March 31, 2020.

Restricted Stock Units

The Bank has granted restricted stock units ("RSUs") to certain of its employees, officers and directors. Upon vesting, one share of common stock is issued from the Bank's authorized shares for each RSU. The number of shares of common stock issued at the time of vesting is generally net of shares withheld to pay taxes due upon vesting. Participants are entitled to dividends and voting rights only upon vesting.

RSUs have time-based vesting requirements ("Time RSUs") or both time-based and performance-based vesting requirements ("Performance RSUs"). RSUs vest evenly over periods ranging from one year to five years from the date of grant. Performance RSUs vest over these periods, provided that certain performance criteria, such as return on average tangible common equity, are met, based on performance periods that are specified for each grant. The following table presents information related to Performance RSUs and Time RSUs:

	Performance RSUs			Time RSUs		
	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term
Nonvested awards as of December 31, 2019	2,596,064	$102.09		367,009	$94.17	
Granted	31,966	$103.77		141,092	$112.86	
Vested	(12,743)	$91.12		(51,552)	$97.40	
Canceled or forfeited	(4,308)	$107.37		(200)	$114.88	
Nonvested awards as of March 31, 2020	2,610,979	$102.15	2.9 years	456,349	$99.57	2.1 years

The total fair value of Performance RSUs that vested in the quarter ended March 31, 2020 was $1.4 million. The total fair value of Time RSUs that vested in the quarter ended March 31, 2020 was $5.8 million. No cash consideration was received in connection with the vesting of these awards.

Performance Share Units

The Bank has granted performance share units ("PSUs") to certain of its employees and officers. Upon vesting, one share of common stock is issued from the Bank's authorized shares for each PSU. The number of shares of common stock issued at the time of vesting is generally net of shares withheld to pay taxes due upon vesting. Participants are entitled to dividends and voting rights only upon vesting. Certain PSUs vest in full after three years, subject to achieving certain performance criteria, while other PSUs vest evenly over periods ranging from three years to five years from the date of grant, provided that certain performance criteria are met. Performance criteria include metrics such as return on average tangible common equity, and are based on performance periods that are specified for each grant. The following table presents information related to PSUs:

	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term
Nonvested awards as of December 31, 2019	988,742	$99.45	
Granted	—	—	
Vested	(41,910)	$90.55	
Canceled or forfeited	—	—	
Nonvested awards as of March 31, 2020	946,832	$99.84	2.2 years

The total fair value of PSUs that vested in the quarter ended March 31, 2020 was $4.6 million. No cash consideration was received in connection with the vesting of these awards.

Compensation Expense

RSUs, PSUs and restricted stock awards ("RSAs") are valued at the closing market price of the Bank's common stock at the grant date, and compensation expense is recognized over the requisite service period, which is generally the vesting period. The Bank accounts for forfeitures of stock awards in the period they occur. All compensation costs related to RSAs have been fully recognized as of March 31, 2020.

The following tables present information regarding share-based compensation expense:

	Quarter Ended March 31,			
	2020		2019	
($ in thousands)	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit
RSUs	$ 26,262	$ 7,565	$ 19,340	$ 5,626
PSUs	8,934	1,701	6,098	1,286
RSAs	—	—	139	41
Total	$ 35,196	$ 9,266	$ 25,577	$ 6,953

	March 31, 2020	
($ in thousands)	Unrecognized Expense	Weighted Average Expected Recognition Period
RSUs	$ 242,386	3.1 years
PSUs	66,814	2.4 years
Total	$ 309,200	

Excess Tax Benefits

Excess tax benefits from exercise or vesting of share-based awards are included as a reduction in provision for income taxes in the period in which the exercise or vesting occurs. The following table presents excess tax benefits recognized, by award type:

	Quarter Ended March 31,			
	2020		2019	
($ in thousands)	Number of Awards Exercised or Vested	Related Excess Tax Benefit	Number of Awards Exercised or Vested	Related Excess Tax Benefit
Stock options	152,592	$ 4,055	723,598	$ 16,766
RSUs	64,295	326	9,102	51
PSUs	41,910	272	41,917	107
RSAs	—	—	4,375	90
Total	258,797	$ 4,653	778,992	$ 17,014

Note 14. Accumulated Other Comprehensive Income (Loss)

The following table presents the changes in the components of accumulated other comprehensive income (loss):

($ in thousands)	Debt Securities Available-For-Sale	Debt Securities Transferred from Available-For-Sale to Held-to-Maturity	Total
Balance at December 31, 2019	**$ 4,293**	**$ 838**	**$ 5,131**
Net unrealized gain on debt securities available-for-sale	17,483	—	17,483
Related tax effect	(5,210)	—	(5,210)
Reclassification of loss on debt securities available-for-sale to net income (1)	115	—	115
Related tax effect (2)	(34)	—	(34)
Amortization of unrealized gain on debt securities transferred from available for-sale to held-to-maturity (3)	—	(246)	(246)
Related tax effect (2)	—	73	73
Other comprehensive income (loss)	12,354	(173)	12,181
Balance at March 31, 2020	**$ 16,647**	**$ 665**	**$ 17,312**
Balance at December 31, 2018	**$ (20,945)**	**$ 1,562**	**$ (19,383)**
Net unrealized gain on debt securities available-for-sale	7,938	—	7,938
Related tax effect	(2,366)	—	(2,366)
Reclassification of loss on debt securities available-for-sale to net income (1)	816	—	816
Related tax effect (2)	(243)	—	(243)
Amortization of unrealized gain on debt securities transferred from available for-sale to held-to-maturity (3)	—	(312)	(312)
Related tax effect (2)	—	93	93
Other comprehensive income (loss)	6,145	(219)	5,926
Balance at March 31, 2019	**$ (14,800)**	**$ 1,343**	**$ (13,457)**

(1) Included in gain (loss) on investment securities on the consolidated statements of income and comprehensive income.

(2) Included in provision for income taxes on the consolidated statements of income and comprehensive income.

(3) Included in interest income on investments on the consolidated statements of income and comprehensive income.

Note 15. Income Taxes

The Bank's effective tax rate was 19.5% and 15.6% for the quarters ended March 31, 2020 and 2019, respectively. The following table presents the reconciliation between the effective tax rate and the federal statutory rate:

Effective Tax Rate	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019
Statutory rate	21.0 %	21.0 %
State taxes, net of federal benefits	8.3	8.0
Tax-exempt income	(7.6)	(6.6)
Investments in life insurance	(0.6)	(0.7)
Tax credits	(16.5)	(15.2)
Tax credit investment amortization	14.6	13.4
Excess tax benefits—stock options	(1.5)	(6.2)
Excess tax benefits—other stock awards	(0.3)	(0.1)
FDIC assessments	0.8	0.7
Other, net	1.3	1.3
Effective tax rate	19.5 %	15.6 %

Note 16. Earnings Per Common Share ("EPS")

The following table presents a reconciliation of the income and share amounts used in the basic and diluted earnings per common share computations:

(in thousands, except per share amounts)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019
Basic EPS:		
Net income	$ 218,686	$ 226,591
Less: Dividends on preferred stock	13,020	12,787
Net income available to common shareholders	$ 205,666	$ 213,804
Weighted average common shares outstanding	170,835	167,112
Net income per common share—basic	$ 1.20	$ 1.28
Diluted EPS:		
Net income available to common shareholders	$ 205,666	$ 213,804
Weighted average shares:		
Common shares outstanding	170,835	167,112
Dilutive effect of stock options	184	1,128
Dilutive effect of restricted stock awards, restricted stock units and performance share units	1,020	1,170
Weighted average diluted common shares outstanding	172,039	169,410
Net income per common share—diluted	$ 1.20	$ 1.26

Stock options, restricted stock awards, restricted stock units and performance share units that are anti-dilutive are not included in the calculation of diluted earnings per common share. The following table presents the weighted average shares of outstanding stock awards that were anti-dilutive for the periods indicated:

	Quarter Ended March 31,	
(in thousands)	**2020**	**2019**
Restricted stock units and performance share units	1,317	11

Note 17. Revenue from Contracts with Customers

Revenue Recognition

The following table presents revenue from contracts with customers, disaggregated by revenue stream, as well as other noninterest income:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Noninterest income:		
Revenue from contracts with customers:		
Investment management fees	$ 99,296	$ 84,924
Brokerage and investment fees	15,183	6,989
Insurance fees	2,157	2,114
Trust fees	4,976	3,889
Deposit fees	6,597	6,320
Other income	1,434	694
Total revenue from contracts with customers	129,643	104,930
Other sources of noninterest income	34,401	27,388
Total noninterest income	$ 164,044	$ 132,318

The Bank earns revenues from contracts with customers primarily for performing investment management, brokerage, sales of insurance and annuity policies, trust and deposit services. Most of the Bank's contracts with customers are open-ended, and the Bank provides services on an ongoing basis for an unspecified contract term. For these ongoing services, the fees are variable, since they are dependent on factors such as the value of underlying assets under management, assets under administration or volume of transactions. The Bank recognizes revenue over the period services are provided to customers and when the uncertainties that determine the amount of revenue are resolved, and the actual fees are known or can be estimated. For certain services that are provided at a specific point in time, the Bank recognizes revenue in full at the time such services are provided.

Contract Balances and Receivables

The Bank records contract liabilities, or deferred revenue, when payments from customers are received or due in advance of providing services to customers. The Bank generally receives payments for its services during the period or at the time services are provided and, therefore, does not have deferred revenue balances at period end.

Receivables from contracts with customers were $10.3 million and $21.8 million at March 31, 2020 and December 31, 2019, respectively, and consist primarily of investment management and brokerage receivables, which are included in other assets on the consolidated balance sheets.

Note 18. Segment Reporting

ASC 280-10, "Segment Reporting," requires that a public business enterprise report certain financial and descriptive information about its reportable operating segments on the basis that is used internally for evaluating segment performance and deciding how to allocate resources to segments. The Bank's two reportable segments are Commercial Banking and Wealth Management.

The principal business activities of the Commercial Banking segment are gathering deposits (retail deposit gathering and private banking activities), originating and servicing loans (primarily real estate secured mortgage loans) and investing in investment securities. The primary sources of revenue for this segment are: interest earned on loans and investment securities, fees earned in connection with loan and deposit services, and income earned on loans serviced for investors. Principal expenses for this segment are interest incurred on interest-bearing liabilities, including deposits and borrowings, general and administrative costs and provision for credit losses.

The principal business activities of the Wealth Management segment are (i) the investment management activities of FRIM, which manages investments for individuals and institutions in equity securities, fixed income securities, balanced portfolios, and alternative investments; (ii) our money market mutual fund activities through third-party providers and the brokerage activities of FRSC (these two activities collectively, "Brokerage and Investment"); (iii) sales of insurance and annuity products through FRSC and FRIM; (iv) trust and custody services provided by the Trust Company; and (v) our foreign exchange activities conducted on behalf of clients. The primary sources of revenue for this segment are investment management fees, brokerage and investment fees, insurance fees, trust fees and foreign exchange fee income. In addition, the Wealth Management segment earns a deposit earnings credit for client deposit accounts that are maintained at the Bank, including sweep deposit accounts. The Wealth Management segment's principal expenses are personnel-related costs and other general and administrative expenses.

Income tax expense for the segments is presented based on the segment's contribution to total consolidated tax expense. Tax preference items are allocated to the segment responsible for the related investments resulting in the tax preference item.

The following tables present the operating results, goodwill and total assets of the Bank's two reportable segments, as well as any reconciling items:

($ in thousands)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At or for the Quarter Ended March 31, 2020				
Net interest income	$ 728,016	$ 24,116	$ —	$ 752,132
Provision for credit losses	48,097	—	—	48,097
Noninterest income from contracts with customers [1]	6,844	132,503	(9,704)	129,643
Other noninterest income	21,747	12,654	—	34,401
Noninterest income	28,591	145,157	(9,704)	164,044
Amortization of intangibles	181	2,103	—	2,284
Other noninterest expense	466,079	137,631	(9,704)	594,006
Noninterest expense	466,260	139,734	(9,704)	596,290
Income before provision for income taxes	242,250	29,539	—	271,789
Provision for income taxes	46,014	7,089	—	53,103
Net income	$ 196,236	$ 22,450	$ —	$ 218,686
Goodwill	$ 24,604	$ 147,012	$ —	$ 171,616
Total Assets	$ 123,381,733	$ 852,288	$ (319,092)	$ 123,914,929

[1] The Commercial Banking segment consists of noninterest income from contracts with customers related to deposit fees and the Wealth Management segment consists of investment management, brokerage and investment, insurance and trust fees.

($ in thousands)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At or for the Quarter Ended March 31, 2019				
Net interest income	$ 652,912	$ 22,126	$ —	$ 675,038
Provision for credit losses	14,200	—	—	14,200
Noninterest income from contracts with customers [(1)]	6,322	106,802	(8,194)	104,930
Other noninterest income	18,331	9,057	—	27,388
Noninterest income	24,653	115,859	(8,194)	132,318
Amortization of intangibles	615	2,765	—	3,380
Other noninterest expense	417,941	111,685	(8,194)	521,432
Noninterest expense	418,556	114,450	(8,194)	524,812
Income before provision for income taxes	244,809	23,535	—	268,344
Provision for income taxes	35,430	6,323	—	41,753
Net income	$ 209,379	$ 17,212	$ —	$ 226,591
Goodwill	$ 51,435	$ 147,012	$ —	$ 198,447
Total Assets	$ 101,388,593	$ 649,222	$ (190,587)	$ 101,847,228

(1) The Commercial Banking segment consists of noninterest income from contracts with customers related to deposit fees and the Wealth Management segment consists of investment management, brokerage and investment, insurance and trust fees.

The reconciling items for revenues include fees for managing the Bank's investment portfolio by FRIM and intercompany management fees related to the training and licensing of the Bank's licensed representatives by FRSC. The reconciling items for assets include subsidiary funds on deposit with the Bank and any intercompany receivable that is reimbursed at least on a quarterly basis.

Note 19. Subsequent Events

The Bank evaluated the effects of events that have occurred subsequent to the quarter ended March 31, 2020.

As discussed in Note 1, "Summary of Significant Accounting Policies," the Bank modified certain loans with borrowers experiencing financial hardship due to COVID-19. As of April 30, 2020, such loan modifications (which are not classified as troubled debt restructurings) totaled approximately $2.0 billion, and an additional $1.9 billion were in process.

Beginning in April 2020, the Bank became a lender under the U.S. Small Business Administration's ("SBA") Paycheck Protection Program ("PPP"), which was established under the CARES Act to provide loans to small businesses impacted by the COVID-19 pandemic for payroll costs and certain operating expenses. The loan terms are identical for all borrowers with a 1% interest rate, a 2-year maturity, and deferral of principal and interest payments for the first six months. Interest accrues during the six-month payment deferral period, and the loan may be repaid prior to maturity without prepayment penalty fees. In addition, the loan may be purchased and forgiven by the SBA if the borrower uses the proceeds for eligible expenses in accordance with program requirements for forgiveness. As of May 6, 2020, the SBA has registered approximately 11,500 PPP loans totaling approximately $2.6 billion for the Bank's small business and non-profit clients throughout the Bank's geographic markets. The Bank has originated or received approval for approximately 85% of these loans directly, while working with other non-profit Community Development Financial Institutions and financial institution partners with SBA lending expertise for the remainder.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Information Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Statements in this Quarterly Report that are not historical facts are hereby identified as "forward-looking statements" for the purpose of the safe harbor provided by Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Any statements about our expectations, beliefs, plans, predictions, forecasts, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but not always, made through the use of words or phrases such as "anticipates," "believes," "can," "could," "may," "predicts," "potential," "should," "will," "estimates," "plans," "projects," "continuing," "ongoing," "expects," "intends" and similar words or phrases. Accordingly, these statements are only predictions and involve estimates, known and unknown risks, assumptions and uncertainties. Our actual results could differ materially from those expressed or anticipated in such forward-looking statements as a result of risks and uncertainties more fully described under "Item 1A. Risk Factors" in this Quarterly Report or under "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019 (the "2019 Form 10-K").

Forward-looking statements involving such risks and uncertainties include, but are not limited to, statements regarding:

- Projections of loans, assets, deposits, liabilities, revenues, expenses, tax liabilities, net income, capital expenditures, liquidity, dividends, capital structure, investments or other financial items;
- Expectations regarding the banking and wealth management industries;
- Descriptions of plans or objectives of management for future operations, products or services;
- Forecasts of future economic conditions generally and in our market areas in particular, which may affect the ability of borrowers to repay their loans and the value of real property or other property held as collateral for such loans;
- Our opportunities for growth and our plans for expansion (including opening new offices);
- Expectations about the performance of any new offices;
- Projections about the amount and the value of intangible assets, as well as amortization of recorded amounts;
- Future provisions for credit losses on loans and debt securities, as well as for unfunded loan commitments;
- Changes in nonperforming assets;
- Expectations regarding the impact of the COVID-19 pandemic (collectively referred to as "COVID-19" herein);
- Projections about future levels of loan originations or loan repayments;
- Projections regarding costs, including the impact on our efficiency ratio; and
- Descriptions of assumptions underlying or relating to any of the foregoing.

Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- Significant competition to attract and retain banking and wealth management customers, from both traditional and non-traditional financial services and technology companies;
- Our ability to recruit and retain key managers, employees and board members;

- The possibility of earthquakes, fires and other natural disasters affecting the markets in which we operate;
- The negative impacts and disruptions resulting from COVID-19 on our colleagues and clients, the communities we serve and the domestic and global economy, which may have an adverse effect on our business, financial position and results of operations;
- Interest rate risk and credit risk;
- Our ability to maintain and follow high underwriting standards;
- Economic and market conditions, including those affecting the valuation of our investment securities portfolio and credit losses on our loans and debt securities;
- Real estate prices generally and in our markets;
- Our geographic and product concentrations;
- Demand for our products and services;
- Developments and uncertainty related to the future use and availability of some reference rates, such as the London Interbank Offered Rate ("LIBOR") and the 11th District Monthly Weighted Average Cost of Funds Index ("COFI"), as well as other alternative reference rates;
- The regulatory environment in which we operate, our regulatory compliance and future regulatory requirements;
- Any future changes to regulatory capital requirements;
- Legislative and regulatory actions affecting us and the financial services industry, such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), including increased compliance costs, limitations on activities and requirements to hold additional capital, as well as changes to the Dodd-Frank Act pursuant to the Economic Growth, Regulatory Relief, and Consumer Protection Act (the "EGRRCPA");
- Our ability to avoid litigation and its associated costs and liabilities;
- Future Federal Deposit Insurance Corporation ("FDIC") special assessments or changes to regular assessments;
- Fraud, cybersecurity and privacy risks; and
- Custom technology preferences of our customers and our ability to successfully execute on initiatives relating to enhancements of our technology infrastructure, including client-facing systems and applications.

All forward-looking statements are necessarily only estimates of future results, and there can be no assurance that actual results will not differ materially from expectations, and, therefore, you are cautioned not to place undue reliance on such statements. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this Quarterly Report, the 2019 Form 10-K and our other public filings under the Exchange Act. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events.

Selected Financial Data

The following table presents our selected financial data and ratios at the dates or for the periods indicated:

($ in thousands, except per share amounts)	At or for the Quarter Ended March 31, 2020	At or for the Quarter Ended March 31, 2019
Selected Financial Data:		
Interest income	$ 956,121	$ 847,017
Interest expense	203,989	171,979
Net interest income	752,132	675,038
Provision for credit losses	48,097	14,200
Net interest income after provision for credit losses	704,035	660,838
Noninterest income	164,044	132,318
Noninterest expense	596,290	524,812
Net income	218,686	226,591
Dividends on preferred stock	13,020	12,787
Net income available to common shareholders	$ 205,666	$ 213,804
Selected Ratios:		
Basic earnings per common share ("EPS")	$ 1.20	$ 1.28
Diluted EPS	$ 1.20	$ 1.26
Net income to average assets [(1)]	0.74 %	0.93 %
Net income available to common shareholders to average common equity [(1)]	9.13 %	10.72 %
Net income available to common shareholders to average tangible common equity [(1)]	9.37 %	11.09 %
Average total equity to average total assets	8.58 %	9.13 %
Dividends per common share	$ 0.19	$ 0.18
Dividend payout ratio	15.9 %	14.3 %
Book value per common share	$ 53.76	$ 48.42
Tangible book value per common share	$ 52.40	$ 46.81
Net interest margin [(1)]	2.74 %	2.97 %
Efficiency ratio [(2)]	65.1 %	65.0 %
Selected Asset Quality Ratios:		
Nonperforming assets to total assets	0.10 %	0.05 %
Allowance for loan credit losses to total loans	0.57 %	0.59 %
Allowance for loan credit losses to nonperforming loans	432.1 %	887.1 %
Net loan charge-offs to average total loans [(1)]	0.00 %	0.00 %
Capital Ratios:		
Tier 1 leverage ratio	8.46 %	8.84 %
Common Equity Tier 1 ("CET1") ratio	9.87 %	10.54 %
Tier 1 risk-based capital ratio	11.14 %	11.82 %
Total risk-based capital ratio	12.62 %	13.50 %

[(1)] Ratios are annualized.

[(2)] Efficiency ratio is the ratio of noninterest expense to the sum of net interest income and noninterest income.

Introduction

We derive our income from the following principal areas: (1) net interest income, which is our largest source of income, and constitutes the difference between the interest income that we receive from interest-earning assets, such as loans and investment securities, and the interest expense that we pay on interest-bearing liabilities, such as deposits and borrowings; (2) fee income from wealth management activities, including investment management, trust, brokerage, insurance, foreign exchange and other banking services; (3) fees for deposit services; (4) loan and related fees, including late charge income, loan-related processing fees, prepayment penalties on sold loans, and payoff fees; and (5) earnings from the sale and servicing of real estate secured loans. We currently operate our business through two business segments: Commercial Banking and Wealth Management.

Critical Accounting Policies and the Impact of Accounting Estimates

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. We base these estimates on our assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

On an ongoing basis, we evaluate our estimates, including those related to allowance for credit losses on loans and income taxes. We consider these to be critical accounting policies because of the significance to our financial condition and results of operations and the complex and subjective judgments, assumptions and estimates involved. The following discussion describes the Bank's allowance for credit losses on loans, which reflects the adoption of Accounting Standards Codification ("ASC") 326, "Financial Instruments—Credit Losses."

Allowance for Credit Losses - Loans

Effective upon the adoption of ASC 326, the Bank estimates its allowance for credit losses using quantitative models, expert judgment, qualitative factors and individual assessments. The Bank's estimate incorporates individual loan level characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of its loans. Loans with similar risk characteristics within each class are pooled when developing the allowance, and loans that do not share similar risk characteristics are individually assessed.

Quantitative probability of default/loss given default models, which are used for residential real estate, income property, tax-exempt business, other business, other secured and other unsecured loans, estimate the likelihood that a loan will default and to measure the loss the Bank would incur if that loan defaults. Estimated loss amounts are based on the macroeconomic forecast scenario, prepayment (or repayment) projections and loan specific risk characteristics over a reasonable and supportable period and a reversion period, after which the Bank reverts to its historical loss rate for the remaining life of the loan.

For capital call lines of credit and the majority of unsecured loans, expected credit losses are determined by expert judgment. Expected loan losses are based on credit attributes specific to each loan type. For capital call lines of credit, such attributes used to estimate a lifetime loss rate include loan size and distribution of commitment amounts. For unsecured loans, such attributes include external publicly available credit metrics for similar products, and weighted average monthly free cash flow at origination.

The Bank also maintains an allowance based on qualitative factors not reflected in the quantitative models or expert judgment, but are likely to cause estimated credit losses. The qualitative factors are intended to address considerations including, but not limited to: the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, lending policies and procedures, and other external factors, such as competition and legal and regulatory environment. It is difficult to estimate how potential changes in these qualitative factors might affect estimated credit losses and current assessments may not reflect the potential future

impact of changes in the nature and volume of the Bank's loan portfolio, changes in the effect of credit concentrations, changes in problem loan trends, changes in lending policies and procedures, and changes in other external factors.

Loans that do not share similar risk characteristics with the other loans in their class are not pooled, but are individually assessed based on the underlying value of the collateral, discounted expected future cash flows for troubled debt restructurings, or based on each loan's individual risk characteristics.

If the credit quality of our loan portfolio declined significantly or if adverse changes in the forecasted economic conditions were to require an increase in our allowance for credit losses, this could have a material adverse effect on our financial condition, results of operations and cash flows.

For a description of the related accounting policies effective January 1, 2020, see Note 1 and Note 4 in "Item 1. Financial Statements."

For a discussion of our other critical accounting policies and estimates, refer to "—Critical Accounting Policies and the Impact of Accounting Estimates" in Item 7 of our 2019 Form 10-K.

Current Accounting Developments

For a discussion of accounting standards that became effective during the quarter ended March 31, 2020 refer to Note 1, "Summary of Significant Accounting Policies—Accounting Standards Adopted in 2020."

The following Accounting Standards Update ("ASU") has been issued by the Financial Accounting Standards Board ("FASB"), but was not yet effective as of March 31, 2020:

ASU 2020-04—Reference Rate Reform (ASC 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting	
The amendments were issued in March 2020 to address the expected discontinuation of LIBOR and other reference rates. Under the new guidance, entities can elect not to apply certain modification accounting requirements to contracts affected by the reference rate reform if 1) the contract references LIBOR or another reference rate expected to be discontinued and 2) the modified terms either directly replace or have the potential to replace the rate expected to be discontinued, and 3) any contemporaneous changes either change or have the potential to change the amount and timing of cash flows related to the replacement of the reference rate. Contract modifications meeting such criteria can generally be accounted for as a continuation of the existing contract and do not need to be remeasured. The amendments also allows the entity to make a one-time election to sell, transfer or both sell and transfer debt securities classified as held-to-maturity that reference a rate affected by reference rate reform that were classified as held-to-maturity as of December 31, 2019. The amendments may be adopted prospectively from the beginning of the first quarter 2020, or any date between March 12, 2020 and December 31, 2022. Once adopted, entities must apply the guidance prospectively to all eligible contract modifications.	The Bank has loans and debt securities that are indexed to reference rates such as LIBOR and COFI that are expected to be discontinued by January 2022. The Bank has ceased originating new loans indexed to these rates, and has established a working group to transition existing loans indexed to LIBOR and COFI. New loan originations are currently indexed to Prime or a 12-month average of 1-year Constant Maturity Treasury ("CMT"). The Bank is continuing to assess the final impact of this guidance on its loan and investment portfolios.

Key Factors Affecting Our Business and Financial Statements

Interest Rates

Net interest income is our largest source of income and is the difference between the interest income on interest-earning assets (usually loans and investment securities) and the interest expense incurred in connection with interest-bearing liabilities (usually deposits and borrowings). The level of net interest income is primarily a function of the average balance of interest-earning assets, the average balance of interest-bearing liabilities and the spread between the contractual yield on such assets and the contractual cost of such liabilities. These factors are influenced by both the pricing and mix of interest-earning assets and interest-bearing liabilities which, in turn, are impacted by external factors such as the local economy, competition for loans and deposits, the monetary policy of the Federal Open Market Committee of the Federal Reserve System (the "FOMC") and market interest rates.

The rates paid on our deposits and short-term borrowings are largely based on short-term interest rates, the level of which is driven primarily by the FOMC's actions. However, the yields generated by our loans and securities are typically driven by short-term and longer-term interest rates, which are set by the market, or, at times by the FOMC's actions, and generally vary from day to day. The level of net interest income is therefore influenced by movements in such interest rates and the pace at which such movements occur. Declines in the yield curve or a decline in longer-term yields relative to short-term yields (a flatter yield curve) would have an adverse impact on our net interest margin and net interest income. FOMC actions in response to COVID-19 are meaningfully influencing the interest-rate environment, which may reduce our net interest margin.

For additional information, see "Item 1A. Risk Factors—We are subject to interest rate risk" in our 2019 Form 10-K, and "Item 1A. Risk Factors" and "Item 3. Quantitative and Qualitative Disclosures About Market Risk" in this Quarterly Report on Form 10-Q.

Regulatory and Supervisory Matters

Our results of operations are affected by the regulatory environment and requirements imposed on us by regulators. The extensive regulation and supervision that govern our business continues to evolve as the legal and regulatory framework changes and as our business grows. As described in our 2019 Form 10-K under "Item 1. Business—Supervision and Regulation," the EGRRCPA and corresponding FDIC rules, among other items, eliminated company-run stress testing requirements for financial institutions with less than $250 billion in total consolidated assets, therefore, we are no longer subject to the Dodd-Frank Act's company-run stress testing requirements. In addition, changes under the EGRRCPA and corresponding FDIC rules expanded the definition of high-quality liquid assets ("HQLA") to include certain municipal obligations. As described further in our 2019 Form 10-K under "Item 1. Business—Supervision and Regulation—Liquidity Rules," because we are a California-chartered, non-member bank without a bank holding company, and are not subject to Category II or III standards under the Tailoring Rules, we are not subject to the Liquidity Coverage Ratio Rule. Nevertheless, we maintain on-balance sheet liquidity and a portfolio of HQLA.

The Dodd-Frank Act prohibits banks and their affiliates from engaging in proprietary trading and investing in and sponsoring hedge funds and private equity funds and other investment vehicles, known as "covered funds," subject to certain detailed exemptions. The statutory provision is commonly called the "Volcker Rule." In August 2019, the FDIC, together with other federal agencies, adopted a final rule amending the regulations that implement the Volcker Rule. The final rule is effective on January 1, 2020 with a compliance date of January 1, 2021 and is intended to simplify and tailor the compliance requirements under the 2013 rule. Among other changes, the 2019 final rule tailors compliance program obligations for trading activities in tiers based on the level of trading assets and liabilities which benefits banking entities with limited trading activities like First Republic Bank and simplifies certain conditions for exemptions to the restrictions that apply to activities engaged in by banking entities. In January 2020, the agencies proposed further amendments to the covered funds provisions of their Volcker Rule regulations. We do not believe the amendments to the regulations that implement the Volcker Rule or the proposed amendments will have a material impact on our business or operations.

We continue to evaluate the impact of these changes, and the nature, extent, timing and impact of any future changes to the Dodd-Frank Act and related regulatory requirements cannot be predicted.

Recent Developments from COVID-19

COVID-19 has created economic and financial disruptions globally and has led governmental authorities to take unprecedented measures to mitigate the spread of the disease, including travel bans, border closings, business closures, quarantines, social distancing and shelter-in-place orders, and to take actions designed to stabilize markets and promote economic growth.

Global health concerns relating to COVID-19 and preventive measures taken to reduce its spread have created significant volatility in the financial markets and impacted our customers and the global and local economies, which have resulted in legislative and regulatory action to assist those negatively impacted by the pandemic.

Loan Modifications

To alleviate borrowers who are experiencing financial difficulty as a result of COVID-19, the Bank has begun offering loan modifications to borrowers. Modifications generally include deferring scheduled principal and/or interest payments for six months. For certain loans, the maturity of the loan may also be extended. Interest continues to accrue, and the deferred payments will be reamortized over the current or extended maturity of the loan; in some cases, a portion of the deferred payments will be included in the borrower's final payment as a balloon payment.

On March 27, 2020, the U.S. Government enacted the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act") which, among other items, provides emergency assistance for individuals, families, and businesses affected by the 2020 pandemic caused by COVID-19. The CARES Act allows entities to elect to suspend the GAAP requirements for qualifying loan modifications that would otherwise be considered troubled debt restructurings. The Bank has elected this relief, and therefore, loan modifications made to borrowers impacted by COVID-19 who were current, or less than 30 days past due, as of December 31, 2019, will not be considered troubled debt restructurings. In addition, such loans will not be reported as nonaccrual. Further, short-term (e.g., six months) loan modifications made for borrowers who were current as of the modification date would also not be considered troubled debt restructurings based on guidance from federal banking regulators.

As of April 30, 2020, such loan modifications (which are not classified as troubled debt restructurings) totaled approximately $2.0 billion, and an additional $1.9 billion were in process. The following table presents a summary of these loan modifications completed and in process as of April 30, 2020, as well as the weighted average loan-to-value ratios ("LTV") for real-estate secured loans, based on appraised value at the time of origination:

	April 30, 2020			
	Loan Modifications			
	Completed		In Process [1]	
($ in millions)	Unpaid Principal Balance	LTV	Unpaid Principal Balance	LTV
Single family (1-4 units)	$ 764	59 %	$ 1,010	59 %
Home equity lines of credit	—	—	116	56 %
Single family construction	14	49 %	9	48 %
Multifamily (5+ units)	340	50 %	163	60 %
Commercial real estate	691	49 %	297	48 %
Multifamily/commercial construction	13	58 %	75	56 %
Capital call lines of credit	—	n/a	—	n/a
Tax-exempt	—	n/a	56	n/a
Other business	105	n/a	129	n/a
Stock secured	—	n/a	2	n/a
Other secured	—	n/a	5	n/a
Unsecured	114	n/a	42	n/a
Total	$ 2,041		$ 1,904	

[1] Represents modifications requested by borrowers that have not yet been completed.

Small Business Administration's Paycheck Protection Program Loans

Beginning in April 2020, the Bank became a lender under the U.S. Small Business Administration's ("SBA") Paycheck Protection Program ("PPP"), which was established under the CARES Act to provide loans to small businesses impacted by the COVID-19 pandemic for payroll costs and certain operating expenses. The loan terms are identical for all borrowers with a 1% interest rate, a 2-year maturity, and deferral of principal and interest payments for the first six months. Interest accrues during the six-month payment deferral period, and the loan may be repaid prior to maturity without prepayment penalty fees. In addition, the loan may be purchased and forgiven by the SBA if the borrower uses the proceeds for eligible expenses in accordance with program requirements for forgiveness. As of May 6, 2020, the SBA has registered approximately 11,500 PPP loans totaling approximately $2.6 billion for the Bank's small business and non-profit clients throughout the Bank's geographic markets. The Bank has originated or received approval for approximately 85% of these loans directly, while working with other non-profit Community Development Financial Institutions and financial institution partners with SBA lending expertise for the remainder.

Mortgage Servicing

For mortgage loans in our servicing portfolio, borrowers who are experiencing financial difficulty as a result of COVID-19 may request a modification, such as payment deferrals. Modifications generally include deferring scheduled principal and/or interest payments for six months. As of April 30, 2020, completed modifications in our mortgage servicing portfolio totaled approximately $77.4 million, and an additional $206.0 million were in process. For the majority of the Bank's mortgage servicing portfolio, the Bank will continue to advance principal and interest payments to investors in accordance with the terms of the underlying servicing agreements.

Regulatory Capital

On March 27, 2020, the federal banking agencies issued an interim final rule ("CECL Interim Final Rule") to provide regulatory capital relief from the impact of COVID-19 and application of the current expected credit losses ("CECL") methodology under ASC 326. The CECL Interim Final Rule allows banks the option to elect to delay the estimated impact of CECL on its regulatory capital over a five-year transition period ending December 31, 2024. The Bank elected this transition relief during the first quarter of 2020, upon adoption of CECL. Refer to "—Capital Resources" for further discussion.

Financial Highlights

At March 31, 2020, total assets were $123.9 billion, a 7% increase compared to $116.3 billion at December 31, 2019 and a 22% increase compared to $101.8 billion at March 31, 2019.

At March 31, 2020, total investment securities were $18.8 billion, a slight increase compared to $18.4 billion at December 31, 2019 and a 17% increase from $16.1 billion at March 31, 2019. Total investment securities represented 15% of total assets at March 31, 2020, compared to 16% at both December 31, 2019 and March 31, 2019. The increase in investment securities for the year was primarily due to purchases of securities considered HQLA, including certain municipal securities and agency residential mortgage-backed securities ("MBS"), partially offset by repayments. For additional discussion regarding our investment portfolio, see "—Balance Sheet Analysis—Investments."

Our holdings of assets that are considered HQLA, including eligible cash, totaled $17.6 billion at March 31, 2020, compared to $14.5 billion at December 31, 2019 and $15.3 billion at March 31, 2019. At March 31, 2020, HQLA represented 14.8% of average total assets for the first quarter of 2020. The HQLA percentage at March 31, 2020 was increased by approximately 80 basis points from the elimination of the reserve requirement by the Federal Reserve Bank ("Federal Reserve") in March 2020.

At March 31, 2020, loans, excluding loans held for sale, were $95.3 billion, a 5% increase compared to $90.8 billion at December 31, 2019 and a 23% increase compared to $77.3 billion at March 31, 2019. Average loan balances for the first quarter of 2020 were $92.8 billion, an increase of 22% compared to $76.3 billion for the first quarter of 2019. Our single family mortgage loans, including single family mortgage loans held for sale and home equity lines of credit ("HELOCs"), were $52.1 billion and represented 54% of total loans at March 31, 2020, compared to $50.5 billion, or 56% of total loans at December 31, 2019 and $41.6 billion, or 54% of total loans at March 31, 2019.

Loan origination volume was $10.3 billion for the first quarter of 2020, compared to $6.5 billion for the first quarter of 2019, an increase of 59%. The increase in loan originations was primarily due to increases in single family, business, multifamily/commercial construction and stock secured lending.

Total deposits were $93.7 billion at March 31, 2020, an increase of 4% compared to $90.1 billion at December 31, 2019, and an increase of 15% compared to $81.6 billion at March 31, 2019. Average deposit balances were $90.5 billion for the first quarter of 2020, an increase of 17% compared to $77.2 billion for the first quarter of 2019. Deposits increased as a result of expanding existing client relationships, referrals from existing clients, and new deposit clients. We continue to emphasize building banking relationships through checking and other transaction deposit accounts. At March 31, 2020, balances in business and personal checking accounts were $57.9 billion, or 62% of total deposits, compared to $52.8 billion, or 59% of total deposits at December 31, 2019 and $48.3 billion, or 59% of total deposits at March 31, 2019. At March 31, 2020, business deposits were $51.3 billion and represented 55% of total deposits, compared to $50.9 billion, or 56% of total deposits at December 31, 2019, and $46.1 billion, or 56% of total deposits at March 31, 2019. Consumer deposits were $42.4 billion and represented 45% of total deposits at March 31, 2020, compared to $39.2 billion, or 44% of total deposits, at December 31, 2019, and $35.5 billion, or 44% of total deposits, at March 31, 2019.

Our Tier 1 leverage ratio at March 31, 2020 was 8.46%. We continue to exceed regulatory guidelines for well-capitalized institutions. Refer to "—Capital Resources" for further discussion of capital ratios and our capital requirements.

Book value per common share was $53.76 at March 31, 2020, a 4% increase from December 31, 2019 and an 11% increase during the last twelve months. Tangible book value per common share was $52.40 at March 31, 2020, a 4% increase from December 31, 2019 and a 12% increase during the last twelve months.

Our capital markets activity for the first quarter of 2020 included the following:

- In January 2020, an offering and sale of 2,500,000 new shares of common stock in an underwritten public offering. Net proceeds, after underwriting discounts and estimated expenses, were approximately $290.6 million.
- In February 2020, an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes, which were issued on February 12, 2020. Net proceeds, after underwriting discounts and estimated expenses, were approximately $496.7 million. The senior notes will mature on February 12, 2024 unless previously redeemed, and are redeemable on February 12, 2023.

Cash dividends paid in the first quarter of 2020 were $0.19 per share of common stock to shareholders of record as of January 30, 2020, compared to $0.18 in the first quarter of 2019. On April 14, 2020, we declared a cash dividend for the first quarter of $0.20 per share, which is payable on May 14, 2020 to shareholders of record as of April 30, 2020. Any future payment of dividends will be subject to ongoing regulatory oversight and board approval.

Wealth management assets under management ("AUM") and assets under administration ("AUA") were $137.9 billion at March 31, 2020, compared to $151.0 billion at December 31, 2019 and $139.9 billion at March 31, 2019. The decrease in AUM and AUA for the quarter was primarily due to market decline, partially offset by net new assets from existing and new clients. See "—Business Segments" for additional information.

The Bank's effective tax rate for the quarter ended March 31, 2020 was 19.5%, compared to 15.6% for the quarter ended March 31, 2019. See "Results of Operations—Quarter Ended March 31, 2020, Compared to Quarter Ended March 31, 2019—Provision for Income Taxes" for additional information.

Results of Operations—Quarter Ended March 31, 2020, Compared to Quarter Ended March 31, 2019

Overview

Net income for the first quarter of 2020 was $218.7 million, compared to $226.6 million for the first quarter of 2019, a decrease of 3% primarily due to increases in the provisions for credit losses and unfunded loan commitments, partially offset by higher net interest income and noninterest income. Diluted EPS for the first quarter of 2020 was $1.20, compared to $1.26 for the first quarter of 2019, a decrease of 5%.

Net income for the Commercial Banking segment for the first quarter of 2020 was $196.2 million, compared to $209.4 million for the first quarter of 2019, a decrease of 6%. The Wealth Management segment's net income for the first quarter of 2020 was $22.5 million, compared to $17.2 million for the first quarter of 2019, an increase of 30%. For a discussion of segment results, see "—Business Segments."

Net Interest Income and Net Interest Margin

Net interest income for the first quarter of 2020 was $752.1 million, compared to $675.0 million for the first quarter of 2019, an increase of 11%. The increase for the quarter was primarily due to an increase in average interest-earning assets.

Net interest margin represents net interest income on a fully taxable-equivalent basis divided by total average interest-earning assets. Net interest margin for the first quarter of 2020 was 2.74%, compared to 2.97% for the first quarter of 2019, a decrease of 23 basis points primarily due to a decrease in the average yield on loans.

Fully taxable-equivalent net interest income for the first quarter of 2020 was $782.6 million, compared to $699.9 million for the first quarter of 2019, an increase of 12%.

On an average basis, interest-earning assets and interest-bearing liabilities both increased 21% for the first quarter of 2020 from the first quarter a year ago.

Yields/Rates (Fully Taxable-Equivalent Basis)

The following table presents the distribution of average assets, liabilities and equity, interest income and resulting yields on average interest-earning assets, and interest expense and rates on average interest-bearing liabilities on a fully taxable-equivalent basis.

($ in thousands)	Quarter Ended March 31, 2020 Average Balance	2020 Interest Income/ Expense [1]	2020 Yields/ Rates [2]	2019 [4] Average Balance	2019 Interest Income/ Expense [1]	2019 Yields/ Rates [2]
Assets:						
Cash and cash equivalents	$ 1,853,579	$ 3,940	0.85 %	$ 1,445,058	$ 7,989	2.24 %
Investment securities:						
U.S. Government-sponsored agency securities	307,449	2,207	2.87 %	1,044,894	7,776	2.98 %
MBS:						
Agency residential and commercial MBS	6,746,664	47,186	2.80 %	6,854,838	49,620	2.90 %
Other residential and commercial MBS	3,834	32	3.33 %	4,528	46	4.03 %
Municipal securities	11,358,749	122,542	4.32 %	8,180,654	94,501	4.62 %
Other investment securities [3]	43,783	320	2.92 %	18,989	120	2.52 %
Total investment securities	18,460,479	172,287	3.73 %	16,103,903	152,063	3.78 %
Loans: [4]						
Residential real estate [5]	51,300,013	404,982	3.16 %	40,973,253	341,784	3.34 %
Multifamily [6]	12,565,723	118,944	3.74 %	10,534,919	99,701	3.79 %
Commercial real estate	7,574,573	78,609	4.11 %	6,702,263	71,947	4.29 %
Multifamily/commercial construction	2,550,647	30,285	4.70 %	2,278,294	28,244	4.96 %
Business [7]	12,390,386	122,971	3.93 %	10,678,134	121,044	4.53 %
Other [8]	6,453,056	47,572	2.92 %	5,088,348	43,946	3.45 %
Total loans	92,834,398	803,363	3.44 %	76,255,211	706,666	3.71 %
Federal Home Loan Bank ("FHLB") stock	406,974	6,960	6.88 %	278,805	5,175	7.53 %
Total interest-earning assets	113,555,430	986,550	3.46 %	94,082,977	871,893	3.71 %
Noninterest-earning assets:						
Noninterest-earning cash	443,255			345,237		
Goodwill and other intangibles	234,078			272,371		
Other assets	4,721,313			4,196,071		
Total noninterest-earning assets	5,398,646			4,813,679		
Total Assets	$ 118,954,076			$ 98,896,656		
Liabilities and Equity:						
Deposits:						
Checking	$ 53,863,519	8,432	0.06 %	$ 46,516,109	6,094	0.05 %
Money market checking and savings	22,475,109	44,869	0.80 %	19,268,808	42,317	0.89 %
Certificates of Deposits ("CDs")	14,185,945	65,544	1.86 %	11,384,085	59,336	2.11 %
Total deposits	90,524,573	118,845	0.53 %	77,169,002	107,747	0.57 %
Borrowings:						
Short-term borrowings	1,231,827	4,700	1.53 %	956,670	6,030	2.56 %
Long-term FHLB advances	13,420,604	66,566	1.99 %	8,503,889	43,167	2.06 %
Senior notes [9]	765,308	4,773	2.49 %	896,654	5,934	2.65 %
Subordinated notes [9]	777,938	9,105	4.68 %	777,526	9,101	4.68 %
Total borrowings	16,195,677	85,144	2.11 %	11,134,739	64,232	2.33 %
Total interest-bearing liabilities	106,720,250	203,989	0.77 %	88,303,741	171,979	0.79 %
Noninterest-bearing liabilities	2,030,107			1,564,278		
Preferred equity	1,145,000			940,000		
Common equity	9,058,719			8,088,637		
Total Liabilities and Equity	$ 118,954,076			$ 98,896,656		
Net interest spread [10]			2.69 %			2.92 %
Net interest income (fully taxable-equivalent basis) and net interest margin [11]		$ 782,561	2.74 %		$ 699,914	2.97 %
Reconciliation of tax-equivalent net interest income to reported net interest income:						
Municipal securities tax-equivalent adjustment		(23,718)			(18,298)	
Business loans tax-equivalent adjustment		(6,711)			(6,578)	
Net interest income, as reported		$ 752,132			$ 675,038	

(1) Interest income is presented on a fully taxable-equivalent basis.
(2) Yields/rates are annualized.
(3) Includes corporate debt securities, mutual funds and marketable equity securities.
(4) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.
(5) Includes single family, home equity lines of credit, and single family construction loans. Also includes single family loans held for sale.
(6) Includes multifamily loans held for sale.
(7) Includes capital call lines of credit, tax-exempt loans and other business loans.
(8) Includes stock secured, other secured and unsecured loans.
(9) Average balances include unamortized issuance discounts and costs. Interest expense includes amortization of issuance discounts and costs.
(10) Net interest spread represents the average yield on interest-earning assets less the average rate on interest-bearing liabilities.
(11) Net interest margin represents net interest income on a fully taxable-equivalent basis divided by total average interest-earning assets.

Interest Income

The following table presents interest income and fully taxable-equivalent interest income:

($ in thousands)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019	% Change Quarter Ended March 31, 2020 vs. 2019
Interest income:			
Loans	$ 796,652	$ 700,088	14 %
Investments	148,569	133,765	11 %
Other [(1)]	6,960	5,175	34 %
Cash and cash equivalents	3,940	7,989	(51)%
Total interest income	$ 956,121	$ 847,017	13 %
Fully taxable-equivalent interest income:			
Loans	$ 803,363	$ 706,666	14 %
Investments	$ 172,287	$ 152,063	13 %

(1) Represents dividends on FHLB stock.

Total interest income consists of interest income on loans and investments, FHLB stock dividends, and interest income on cash and cash equivalents. Total interest income was $956.1 million for the first quarter of 2020, compared to $847.0 million for the first quarter of 2019. The increase for the quarter was the result of an increase of 21% in average interest-earning assets, which were $113.6 billion, compared to $94.1 billion for the first quarter of 2019, partially offset by a decrease in the average yield on interest-earning assets to 3.46% from 3.71% for the first quarter of 2019.

Loans

Interest income on loans for the first quarter of 2020 was $796.7 million, compared to $700.1 million for the first quarter of 2019. Fully taxable-equivalent interest income on loans was $803.4 million for the first quarter of 2020, compared to $706.7 million for the first quarter of 2019. The increase for the quarter was due to continued loan growth, partially offset by lower loan yields. Average loan balances were $92.8 billion for the first quarter of 2020, compared to $76.3 billion for the first quarter of 2019, an increase of 22%. The average yield on loans was 3.44% for the first quarter of 2020, a decrease of 27 basis points basis points compared to 3.71% for the first quarter of 2019.

Interest income on loans included prepayment penalty fees of $2.7 million for the first quarter of 2020, compared to $2.0 million for the first quarter of 2019. The increase in these fees compared to the same period a year ago was primarily due to higher prepayments on single family and multifamily loans.

Our yield on loans is affected by a number of factors: market interest rates, the level of adjustable-rate loan indices, interest rate floors and caps, the repayment rate of loans, portfolio mix and the level of nonaccrual loans. Our weighted average contractual loan rate (on a fully taxable-equivalent basis) was 3.38% at March 31, 2020, compared to 3.50% at December 31, 2019 and 3.69% at March 31, 2019. For adjustable-rate mortgages ("ARMs"), the yield is also affected by the timing of changes in the loan rates, which generally lag market rate changes. At March 31, 2020, approximately 30% of our total loans were adjustable-rate or mature within one year, compared to 29% and 32% at December 31, 2019 and March 31, 2019, respectively.

Investments

Interest income on investments for the first quarter of 2020 was $148.6 million, compared to $133.8 million for the first quarter of 2019. The increase for the quarter was primarily due to higher average investment balances,

partially offset by lower yield. Fully taxable-equivalent interest income on investments was $172.3 million for the first quarter of 2020, compared to $152.1 million for the first quarter of 2019.

Average investment balances were $18.5 billion for the first quarter of 2020, compared to $16.1 billion for the first quarter of 2019, an increase of 15%. The increase was primarily due to purchases of new investments, partially offset by calls and paydowns of debt securities. The average yield on investment securities for the first quarter of 2020 was 3.73%, compared to 3.78% for the first quarter of 2019, a decline of 5 basis points. The yield decline was the result of lower yields on municipal securities and agency residential and commercial MBS.

FHLB Stock

Dividends on FHLB stock for the first quarter of 2020 were $7.0 million, compared to $5.2 million for the first quarter of 2019. The increase in dividend income was due to higher average FHLB stock balances. Average FHLB stock balances were $407.0 million for the first quarter of 2020, an increase of 46% compared to $278.8 million for the first quarter of 2019. The average yield on FHLB stock was 6.88% for the first quarter of 2020, compared to 7.53% for the first quarter of 2019.

Interest Expense

The following table presents interest expense:

	Quarter Ended March 31,		% Change Quarter Ended March 31,
($ in thousands)	**2020**	**2019**	**2020 vs. 2019**
Interest expense:			
Deposits:			
Checking	$ 8,432	$ 6,094	38 %
Money market checking and savings	44,869	42,317	6 %
CDs	65,544	59,336	10 %
Total interest expense on deposits	118,845	107,747	10 %
Borrowings:			
Short-term borrowings	4,700	6,030	(22)%
Long-term FHLB advances	66,566	43,167	54 %
Senior notes	4,773	5,934	(20)%
Subordinated notes	9,105	9,101	0 %
Total interest expense on borrowings	85,144	64,232	33 %
Total interest expense	$ 203,989	$ 171,979	19 %

Total interest expense consists of interest expense on deposits, federal funds purchased, FHLB advances, senior notes and subordinated notes. Total interest expense was $204.0 million for the first quarter of 2020, compared to $172.0 million for the first quarter of 2019. The increase was the result of an increase of 21% in average interest-bearing liabilities, which were $106.7 billion for the first quarter of 2020, compared to $88.3 billion for the first quarter of 2019, partially offset by a slight decline in the average cost of interest-bearing liabilities to 0.77% for the first quarter of 2020 from 0.79% for the first quarter of 2019.

Deposits

Interest expense on deposits was $118.8 million for the first quarter of 2020, compared to $107.7 million for the first quarter of 2019. The increase in interest expense was driven by growth in deposit balances, partially offset by a decrease in rates paid on deposits. The average interest rate paid on deposits was 0.53% and 0.57% for the first quarter of 2020 and 2019, respectively.

Interest expense on checking deposits was $8.4 million for the first quarter of 2020, compared to $6.1 million for the first quarter of 2019. The increase for the quarter was due to an increase in average balances. Average checking deposit balances were $53.9 billion for the first quarter of 2020, compared to $46.5 billion for the first quarter of 2019, an increase of 16%. The average interest rate paid on checking deposits was 0.06% for the first quarter of 2020, compared to 0.05% for the first quarter of 2019.

Interest expense on money market checking and savings deposits was $44.9 million for first quarter of 2020, compared to $42.3 million for the first quarter of 2019. The increase for the quarter was due to an increase in average balances, partially offset by a decrease in rates paid. Average money market checking and savings deposit balances were $22.5 billion for the first quarter of 2020, compared to $19.3 billion for the first quarter of 2019, an increase of 17% for the quarter. The average interest rate paid on money market checking and savings deposits was 0.80% for the first quarter of 2020, compared to 0.89% for the first quarter of 2019.

Interest expense on CDs was $65.5 million for the first quarter of 2020, compared to $59.3 million for the first quarter of 2019. The increase for the quarter was due to an increase in average balances, partially offset by a decrease in rates paid. Average CD balances were $14.2 billion for the first quarter of 2020, compared to $11.4 billion for the first quarter of 2019, an increase of 25% for the quarter. The average interest rate paid on CDs was 1.86% for the first quarter of 2020, compared to 2.11% for the first quarter of 2019.

Average deposit balances were $90.5 billion for the first quarter of 2020, an increase of 17% from $77.2 billion for the first quarter of 2019. The following table presents average deposit balances by deposit type as a percentage of average total deposits:

	Quarter Ended March 31,	
Average Deposits by Type as a % of Average Total Deposits	**2020**	**2019**
Checking	59 %	60 %
Money market checking and savings	25 %	25 %
CDs	16 %	15 %

At March 31, 2020, our total deposits were $93.7 billion, compared to $81.6 billion at March 31, 2019, an increase of 15%, and the weighted average contractual rate paid on total deposits was 0.36% and 0.64%, respectively. We will continue to focus on growth in our core deposit base to fund a significant percentage of our future asset growth, although there can be no assurance we will be successful. If we are not successful, we may need to use other sources of funding, such as federal funds purchased, FHLB advances, unsecured term senior notes or unsecured term subordinated notes, which are generally higher in cost.

Borrowings

Interest expense on borrowings was $85.1 million for the first quarter of 2020, compared to $64.2 million for the first quarter of 2019. The increase was primarily due to increases in average long-term borrowings.

Short-term borrowings, which include federal funds purchased and short-term FHLB advances, have an original maturity of one year or less. We had no short-term borrowings at both March 31, 2020 and March 31, 2019. Interest expense on short-term borrowings was $4.7 million for the first quarter of 2020, compared to $6.0 million for the first quarter of 2019. The decrease was due to a decrease in the average cost of short-term FHLB advances, partially offset by higher average balances. The average cost of short-term borrowings was 1.53% for the first quarter of 2020, compared to 2.56% for the first quarter of 2019. Such decrease in the average cost was consistent with the decrease in the average Federal Funds rate, which was 1.40% in the first quarter of 2020 compared to 2.50% in the first quarter of 2019. Average short-term borrowings for the first quarter of 2020 were $1.2 billion, compared to $956.7 million for the first quarter of 2019.

At March 31, 2020, long-term FHLB advances outstanding were $16.3 billion, compared to $8.0 billion at March 31, 2019. Interest expense on long-term FHLB advances was $66.6 million for the first quarter of 2020,

compared to $43.2 million for the first quarter of 2019. The increase for the quarter was due to an increase in average balances, partially offset by a decrease in the average cost of long-term FHLB advances. Average long-term FHLB advances for the first quarter of 2020 were $13.4 billion, an increase of 58% compared to $8.5 billion for the first quarter of 2019. Average long-term FHLB advances as a proportion of total average interest-bearing liabilities were 13% for the first quarter of 2020, compared to 10% for the first quarter of 2019. The average cost of long-term FHLB advances was 1.99% and 2.06% for the first quarter of 2020 and 2019, respectively. The decrease was the result of lower interest rates on new advances, compared to the interest rates on matured borrowings.

At March 31, 2020, the carrying value of unsecured senior notes was $994.7 million, compared to $896.9 million at March 31, 2019. Interest expense on our senior notes was $4.8 million for the first quarter of 2020, compared to $5.9 million for the first quarter of 2019, and includes contractual interest, increased by amortization of issuance discounts and offering costs. The 2.375% fixed-rate senior notes issued in June 2014 of $400.0 million were repaid at their maturity date in the second quarter of 2019. During the first quarter of 2020, the Bank completed an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes due 2024.

At March 31, 2020, the carrying value of unsecured subordinated notes totaled $778.0 million, compared to $777.6 million at March 31, 2019. Interest expense on our subordinated notes was $9.1 million for both the first quarter of 2020 and 2019, and includes contractual interest, increased by amortization of issuance discounts and offering costs.

Provision for Credit Losses

The following table presents information related to the provision for credit losses:

	Quarter Ended March 31,		% Change Quarter Ended March 31,
($ in thousands)	**2020**	**2019**	**2020 vs. 2019**
Provision for credit losses:			
Debt securities held-to-maturity	$ 418	$ —	NM
Loans	47,679	14,200	236 %
Total	$ 48,097	$ 14,200	239 %

Note: Variances that are not meaningful (NM) are not presented in the table above.

Beginning in the first quarter of 2020, the Bank adopted the CECL methodology under ASC 326, in which the allowance for credit losses reflects expected credit losses over the life of loans and held-to-maturity debt securities, and incorporates macroeconomic forecasts as well as historical loss rates. Prior to adoption of ASC 326, the level of provision for credit losses for loans was based on an incurred loss methodology, which did not incorporate lifetime expected losses or macroeconomic forecasts. The provision for credit losses was $48.1 million for the first quarter of 2020, compared to $14.2 million for the first quarter of 2019. The increase in the provision for credit losses for loans reflects loan growth, including growth in business loans, as well as the implementation of the CECL methodology, which incorporates a change in the macroeconomic forecast late in the first quarter of 2020 to reflect the pandemic conditions.

The macroeconomic forecasts used in determining allowance for credit losses, under different conditions or using different assumptions or estimates could result in significantly different changes in allowance for credit losses. It is difficult to estimate how potential changes in specific factors might affect overall allowance for credit losses and current results may not reflect the potential future impact of macroeconomic forecast changes.

Noninterest Income

The following table presents noninterest income:

($ in thousands)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019	% Change Quarter Ended March 31, 2020 vs. 2019
Noninterest income:			
Investment management fees	$ 99,296	$ 84,924	17 %
Brokerage and investment fees	15,826	7,659	107 %
Insurance fees	2,157	2,114	2 %
Trust fees	4,976	3,889	28 %
Foreign exchange fee income	12,184	8,631	41 %
Deposit fees	6,597	6,320	4 %
Loan and related fees	6,114	4,007	53 %
Loan servicing fees, net	1,652	3,788	(56)%
Gain on sale of loans	1,925	359	436 %
Gain (loss) on investment securities	2,628	(149)	NM
Income from investments in life insurance	8,160	9,335	(13)%
Other income	2,529	1,441	76 %
Total noninterest income	$ 164,044	$ 132,318	24 %

Note: Variances that are not meaningful (NM) are not presented in the table above.

Noninterest income for the first quarter of 2020 was $164.0 million, compared to $132.3 million for the first quarter of 2019. The increase was primarily due to growth in wealth management fees and a gain on investment securities for the first quarter of 2020.

Wealth Management Fees

Wealth management fees consist of fees earned for the management or administration of clients' assets, as well as commissions and trading revenues generated from the execution of client-related brokerage and investment activities, revenue earned from selling life insurance and annuity policies and fees earned for assisting clients with foreign exchange transactions. For additional information on the AUM and AUA for the entities comprising the Wealth Management segment, see "—Business Segments."

Investment management fees. We provide traditional portfolio management and customized client portfolios through First Republic Investment Management, Inc. ("FRIM"). We earn fee income from the management of equity securities, fixed income securities, balanced portfolios, and alternative investments for our clients. In addition, we employ experienced wealth managers to work with our relationship managers to generate new AUM using an open architecture platform. Investment management fees were $99.3 million for the first quarter of 2020, compared to $84.9 million for the first quarter of 2019. Investment management fees vary with the amount of assets managed and the type of services and investments chosen by the client, which are impacted by market conditions. Generally, higher fees are earned for managing equity securities than for managing a fixed income portfolio. FRIM's AUM were $60.1 billion at March 31, 2020, compared to $66.7 billion at March 31, 2019, a decrease of 10% primarily due to the departure of wealth managers in 2019, partially offset by net new assets from existing and new clients. The addition of client assets was the result of growth in investment management services to Bank clients, acquiring new clients, the successful marketing efforts of existing wealth managers and the hiring of experienced wealth managers who brought their clients with them. The future level of investment management fees depends on the level and mix of AUM, type of services and investments chosen by the client, market conditions and our ability to attract new clients.

Brokerage and investment fees. We perform brokerage and investment activities for clients through First Republic Securities Company, LLC ("FRSC"). We employ wealth managers to offer brokerage services for equity securities, mutual funds, exchange-traded funds, unit investment trust, alternative investments, hedging strategies, treasury securities, municipal bonds, other fixed income securities, money market mutual funds and other shorter-term liquid investments at the request of clients or their financial advisors. Brokerage and investment fees were $15.8 million for the first quarter of 2020, compared to $7.7 million for the first quarter of 2019. The increase was primarily due to higher transaction volume. Such fees vary based on the volume and type of transaction activity, conditions in the securities markets and our ability to attract new clients. In addition, at March 31, 2020, we held $67.1 billion of client assets in brokerage accounts through FRSC and in third-party money market mutual funds, compared to $62.2 billion at March 31, 2019, an increase of 8%, primarily due to net new assets from existing and new clients, partially offset by market decline.

Insurance fees. We earn revenue from selling life insurance and annuity policies to our clients through FRSC and FRIM. Insurance fees consist of initial commissions when a policy is sold and subsequent commissions each year that a policy is renewed. Insurance fees were $2.2 million for the first quarter of 2020, compared to $2.1 million for the first quarter of 2019. Such fees vary based on the level of sales of insurance and annuity products and our ability to attract new clients. There is no underwriting risk for the Bank from the sale of insurance products.

Trust fees. First Republic Trust Company, a division of the Bank, First Republic Trust Company of Delaware LLC ("FRTC Delaware"), and First Republic Trust Company of Wyoming LLC ("FRTC Wyoming") (collectively, the "Trust Company") specializes in personal trusts and custody services and operates in California, Oregon, Washington, New York, Massachusetts, Delaware, Florida, Wyoming and Connecticut. The Trust Company draws new trust clients from our Preferred Banking and wealth management client base, as well as from outside of our organization. Trust fees for the first quarter of 2020 were $5.0 million, compared to $3.9 million for the first quarter of 2019. At March 31, 2020, assets under custody or administration were $10.7 billion, compared to $11.0 billion at March 31, 2019. Trust fees are primarily based on the level and mix of assets under custody or administration and will vary in the future based on these factors.

Foreign exchange fee income. Foreign exchange fee income represents fees we earn from transacting foreign exchange business on behalf of our clients. We earned $12.2 million of foreign exchange fee income for the first quarter of 2020, compared to $8.6 million for the first quarter of 2019. The increase in foreign exchange fees was primarily driven by higher transaction volume from both existing and new clients.

We execute foreign exchange trades with clients and then offset those trades with other financial institution counterparties, such as major investment banks or large commercial banks. We do not retain significant foreign exchange risk associated with these transactions, as the trades with the client and the financial institution counterparty are matched on our books. We do retain credit risk, both to the client and the counterparty institution, which is evaluated and managed by us in the normal course of our operations. In addition, we have foreign exchange contracts associated with client deposits denominated in various foreign currencies.

Other Noninterest Income

Deposit fees. We earn fees from our clients for deposit services. Deposit fees were $6.6 million for the first quarter of 2020, compared to $6.3 million for the first quarter of 2019. The increase in deposit fees was primarily driven by volume of activity from both existing and new clients and growth in overall deposits.

Loan and related fees. Loan and related fee income was $6.1 million for the first quarter of 2020, compared to $4.0 million for the first quarter of 2019. Loan and related fee income includes: late charge income, which generally increases with growth in the average loan and servicing portfolios; loan related processing or commitment fees that vary with market conditions and origination volumes; prepayment penalties on sold loans; and payoff fees that vary with loan repayment activity and market conditions such as the general level of longer-term interest rates.

Loan servicing fees, net. Net loan servicing fees are derived from the amount of loans serviced, the fees earned from servicing such loans (expressed as a percent of loans serviced that are retained), the amortization rate of mortgage servicing rights ("MSRs") and the amount of provisions for, or reversal of, the MSR valuation allowance. The following table presents net loan servicing fees:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Contractually specified servicing fees	$ 5,649	$ 7,058
MSR amortization expense	(3,347)	(3,270)
MSR net provision for valuation allowance	(650)	—
Loan servicing fees, net	$ 1,652	$ 3,788

Net loan servicing fees were $1.7 million for the first quarter of 2020, compared to $3.8 million for the first quarter of 2019. The decrease for the quarter was primarily due to the decline in the size of the servicing portfolio and the provision for valuation allowance due to lower interest rates. The average servicing portfolio for the first quarter of 2020 was $9.1 billion, compared to $11.5 billion a year ago, a decrease of 21%.

Contractual servicing fees were $5.6 million for the first quarter of 2020, compared to $7.1 million for the first quarter of 2019, a decrease of 20%. The amount of contractual servicing fees depends upon the size of the servicing portfolio, the terms of the loans at origination, the interest rate environment and conditions in the secondary market when the loans are sold, as well as the rate of loan payoffs. Annualized weighted average servicing fees collected as a percentage of loans serviced were 0.25% for both the first quarter of 2020 and 2019.

The amount of net loan servicing fees that we record is affected by the repayment of loans in the servicing portfolio. For the first quarter of 2020, the overall annualized repayment speed experienced on loans serviced was 23%, compared to 14% for the first quarter of 2019. If actual repayments of loans serviced are lower than our estimate of future repayments, we could reduce the amortization of MSRs and release a valuation allowance, if any, which would increase our expected level of future earnings. If actual repayments on loans serviced are higher than our estimates of future repayments, we may be required to increase the amortization of MSRs and reduce the carrying value of MSRs through the establishment of an additional valuation allowance, thereby decreasing our expected level of current and future earnings.

Gain on sale of loans. The net gain on sales of loans fluctuates with the amount and type of loans sold. The amount of loans that we sell depends upon conditions in the mortgage origination, loan securitization and secondary loan sales markets, the interest rate environment, as well as our pricing and asset/liability management strategy. Gain on sale of loans also includes adjustments made to loans held for sale from any adjustments to the cost of loans based on current market prices. The following table presents loan sales activity and gain on sale of loans:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Gain on sale of loans	$ 1,925	$ 359
Loans sold	$ 495,313	$ 180,629
Gain on sale of loans as a percentage of loans sold	0.39 %	0.20 %

The higher level of gain on sales for the first quarter of 2020 was the result of a higher volume of loans sold and higher margins.

Gain (loss) on investment securities. The gain (loss) on investment securities consists of activity from sales of investment securities and includes changes in fair value of the Bank's marketable equity securities. The gain (loss) varies based on the amount and type of investments sold and market conditions. The following table presents net gain (loss) on investment securities:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Net gain (loss) on sales of investment securities	$ 2,639	$ (816)
Net change in fair value of equity securities	(11)	667
Gain (loss) on investment securities	$ 2,628	$ (149)

Income from investments in life insurance. Income from investments in life insurance was $8.2 million for the first quarter of 2020, compared to $9.3 million for the first quarter of 2019. The decrease was due to market value adjustments for certain life insurance contracts, partially offset by reduced employee benefits. The book value of this portfolio of tax-exempt investments was $1.5 billion and $1.4 billion at March 31, 2020 and 2019, respectively.

Noninterest Expense

The following table presents noninterest expense:

	Quarter Ended March 31,		% Change Quarter Ended March 31,
($ in thousands)	**2020**	**2019**	**2020 vs. 2019**
Noninterest expense:			
Salaries and employee benefits	$ 361,204	$ 313,253	15 %
Information systems	70,715	67,170	5 %
Occupancy	53,641	43,895	22 %
Professional fees	13,117	11,681	12 %
Advertising and marketing	11,843	15,734	(25)%
FDIC assessments	10,185	8,903	14 %
Provision (reversal of provision) for unfunded loan commitments	14,273	(217)	NM
Other expenses	61,312	64,393	(5)%
Total noninterest expense	$ 596,290	$ 524,812	14 %

Note: Variances that are not meaningful (NM) are not presented in the table above.

Noninterest expense was $596.3 million for the first quarter of 2020, compared to $524.8 million for the first quarter of 2019. The increase in noninterest expense was primarily due to higher salaries and employee benefits and occupancy expenses from the continued investments in the expansion of the franchise, along with an increase in the provision for unfunded loan commitments.

Noninterest expense was reduced by certain general and administrative costs, primarily compensation costs directly related to loan originations, which have been capitalized in accordance with ASC 310-20, "Nonrefundable Fees and Other Costs." We capitalized loan origination costs of $40.9 million for the first quarter of 2020, compared to $26.6 million for the first quarter of 2019, an increase of $14.3 million, or 54%. The amount of capitalized costs varies directly with the volume of loan originations and the costs incurred to make new loans. The capitalized costs are reported as net deferred loan fees and costs on our balance sheet and are amortized to interest income over the contractual life of the loans.

Our efficiency ratio, the ratio of noninterest expense to the sum of net interest income and noninterest income, was 65.1% for the first quarter of 2020, compared to 65.0% for the first quarter of 2019.

Salaries and employee benefits. Salaries and employee benefits is the largest component of noninterest expense and includes the cost of salaries, incentive compensation, benefit plans, health insurance and payroll taxes, which have collectively increased as we hired additional personnel to support our growth and our enhanced regulatory infrastructure. Salaries and employee benefit expenses were $361.2 million for the first quarter of 2020, compared to $313.3 million for the first quarter of 2019. The increase was primarily the result of the addition of new personnel to support higher levels of lending, deposit growth, expansion of wealth management and higher incentive compensation related to the continued expansion of our franchise. At March 31, 2020, we had 4,893 full-time equivalent employees, including temporary employees and independent contractors, a 6% increase from 4,612 at March 31, 2019.

Information systems. These expenses include payments to vendors that provide software and services on an outsourced basis, costs related to supporting and developing digital platforms and the costs associated with telecommunications for ATMs, office activities and internal networks. Expenses for information systems were $70.7 million for the first quarter of 2020, compared to $67.2 million for the first quarter of 2019. The increase in information systems costs was primarily due to continued technology initiatives to upgrade our systems, including our mobile and online banking platform, enhance the client experience and support our growth, as well as increased costs from the Bank's business continuity response to the pandemic conditions.

Occupancy. Occupancy costs were $53.6 million for the first quarter of 2020, compared to $43.9 million for the first quarter of 2019. The increase was primarily due to expanding our office space in existing markets for new employees, increased rental costs in certain locations and rental costs for additional banking office locations. We expect the level of occupancy costs to vary with the number of offices and our staffing levels.

Professional fees. Professional fees include legal services required to complete certain transactions, resolve legal matters or delinquent loans, and the cost of loan review professionals, co-sourced internal audit, external auditors and other consultants, including consulting services dedicated to technology initiatives. Such expenses were $13.1 million for the first quarter of 2020, compared to $11.7 million for the first quarter of 2019. The increase in professional fees was primarily due to an increase in consulting fees, partially offset by a decrease in audit fees.

Advertising and marketing. We advertise in various forms of media, including digital media, newspapers, radio, and television, primarily to support growth in our Preferred Banking offices and for advertising and marketing initiatives. Advertising and marketing expenses were $11.8 million for the first quarter of 2020 and $15.7 million for the first quarter of 2019. These expenses vary based on the number of marketing initiatives, level of advertising costs and costs associated with holding client events to support our growth. The decrease for the quarter was primarily due to a decrease in deposit-related promotions and decreased costs associated with holding client events in response to the pandemic conditions.

FDIC assessments. FDIC assessments were $10.2 million for the first quarter of 2020, compared to $8.9 million for the first quarter of 2019. The increase was primarily due to growth in the assessment base as a result of the growth in average total assets.

Provision (reversal of provision) for unfunded loan commitments. Beginning in the first quarter of 2020, the Bank adopted the CECL methodology under ASC 326. The level of provision for unfunded loan commitments is determined based on the dollar amounts expected to fund, and the loss rates that are calculated using the same assumptions as the associated funded balance. The provision for unfunded loan commitments was $14.3 million for the first quarter of 2020, compared to a reversal of provision of $217,000 for the first quarter of 2019. The increase was due to the implementation of the CECL methodology, which incorporates a change in the macroeconomic forecast late in the first quarter of 2020 to reflect the pandemic conditions.

Other expenses. Other expenses were $61.3 million for the first quarter of 2020, compared to $64.4 million for the first quarter of 2019. These expenses include costs related to lending and deposit activities, client service, insurance, hiring, training and other costs related to expanding operations, as well as amortization of intangibles. The decrease of $7.3 million in deposit client related costs was primarily due to lower expenses associated with foreign currency deposit balances. Other operating expenses include postage, charitable contributions, cash management, custody and clearing, and other miscellaneous expenses. The following table presents the main components of other expenses:

	Quarter Ended March 31,	
($ in thousands)	**2020**	**2019**
Deposit client related costs	$ 12,707	$ 20,044
Travel and entertainment	5,361	5,954
Subscriptions	4,469	3,966
Loan related costs	3,500	3,532
Insurance	3,008	2,905
Amortization of intangibles	2,284	3,380
Training	1,886	4,029
Recruiting fees	1,581	2,186
Other operating expenses	26,516	18,397
Total other expenses	$ 61,312	$ 64,393

Provision for Income Taxes

The provision for income taxes varies from statutory rates due to the amount of income for financial statement and tax purposes and the rates charged by federal and state authorities.

The Bank's effective tax rate for the first quarter of 2020 was 19.5% compared to 15.6% for the first quarter of 2019. The effective tax rate varies based on the level of tax credit investments, tax-exempt securities, tax-advantaged loans, investments in life insurance and the amount of excess tax benefits from exercise or vesting of share-based awards. The increase in the effective tax rate was primarily the result of lower excess tax benefits due to a decrease in stock options exercised by employees.

The following table presents additional information about the effective tax rate:

	Quarter Ended March 31,	
Effective Tax Rate	**2020**	**2019**
Effective tax rate, prior to excess tax benefits	21.3 %	21.9 %
Excess tax benefits—stock options	(1.5)	(6.2)
Excess tax benefits—other stock awards	(0.3)	(0.1)
Total excess tax benefits	(1.8)	(6.3)
Effective tax rate	19.5 %	15.6 %

The number of options exercised or stock awards vested impact the amount of excess tax benefits recorded as a reduction in provision for income taxes. The following table presents excess tax benefits recognized for stock options and other stock awards:

	Quarter Ended March 31,			
	2020		2019	
($ in thousands)	Number of Awards Exercised or Vested	Related Excess Tax Benefit	Number of Awards Exercised or Vested	Related Excess Tax Benefit
Stock options	152,592	$ 4,055	723,598	$ 16,766
Other stock awards	106,205	598	55,394	248
Total	258,797	$ 4,653	778,992	$ 17,014

Business Segments

We currently conduct our business through two reportable business segments: Commercial Banking and Wealth Management.

The principal business activities of the Commercial Banking segment are gathering deposits (retail deposit gathering and private banking activities), originating and servicing loans (primarily real estate secured mortgage loans) and investing in investment securities. The primary sources of revenue for this segment are: interest earned on loans and investment securities, fees earned in connection with loan and deposit services, and income earned on loans serviced for investors. Principal expenses for this segment are interest incurred on interest-bearing liabilities, including deposits and borrowings, general and administrative costs and provision for credit losses.

The principal business activities of the Wealth Management segment are (i) the investment management activities of FRIM, which manages investments for individuals and institutions in equity securities, fixed income securities, balanced portfolios, and alternative investments; (ii) our money market mutual fund activities through third-party providers and the brokerage activities of FRSC (these two activities collectively, "Brokerage and Investment"); (iii) sales of insurance and annuity products through FRSC and FRIM; (iv) trust and custody services provided by the Trust Company; and (v) our foreign exchange activities conducted on behalf of clients. The primary sources of revenue for this segment are investment management fees, brokerage and investment fees, insurance fees, trust fees and foreign exchange fee income. In addition, the Wealth Management segment earns a deposit earnings credit for client deposit accounts that are maintained at the Bank, including sweep deposit accounts. The Wealth Management segment's principal expenses are personnel-related costs and other general and administrative expenses. For complete segment information, see Note 18 to "Item 1. Financial Statements."

Commercial Banking

The following table presents the operating results of the Bank's Commercial Banking segment:

	Quarter Ended March 31,		% Change Quarter Ended March 31,
($ in thousands)	**2020**	**2019**	**2020 vs. 2019**
Net interest income	$ 728,016	$ 652,912	12 %
Provision for credit losses	48,097	14,200	239 %
Noninterest income	28,591	24,653	16 %
Noninterest expense	466,260	418,556	11 %
Income before provision for income taxes	242,250	244,809	(1)%
Provision for income taxes	46,014	35,430	30 %
Net income	$ 196,236	$ 209,379	(6)%

Net interest income for Commercial Banking for the first quarter of 2020 was $728.0 million, compared to $652.9 million for the first quarter of 2019. The increase for the quarter was primarily due to an increase in average interest-earning assets.

Beginning in the first quarter of 2020, the Bank adopted the CECL methodology under ASC 326, in which the allowance for credit losses reflects expected credit losses over the life of loans and held-to-maturity debt securities, and incorporates macroeconomic forecasts as well as historical loss rates. Prior to adoption of ASC 326, the level of provision for credit losses for loans was based on an incurred loss methodology, which did not incorporate lifetime expected losses or macroeconomic forecasts. The provision for credit losses for Commercial Banking was $48.1 million for the first quarter of 2020, compared to $14.2 million for the first quarter of 2019. The increase reflects loan growth, including growth in business loans, as well as the implementation of the CECL methodology, which incorporates a change in the macroeconomic forecast late in the first quarter of 2020 to reflect the pandemic conditions. The macroeconomic forecasts used in determining allowance for credit losses, under different conditions or using different assumptions or estimates could result in significantly different changes in allowance for credit losses. It is difficult to estimate how potential changes in specific factors might affect overall allowance for credit losses and current results may not reflect the potential future impact of macroeconomic forecast changes.

Noninterest income for Commercial Banking was $28.6 million for the first quarter of 2020, compared to $24.7 million for the first quarter of 2019. The increase was primarily due to a gain on investment securities for the first quarter of 2020.

Noninterest expense for Commercial Banking was $466.3 million for the first quarter of 2020, compared to $418.6 million for the first quarter of 2019. The increase was primarily due to higher salaries and employee benefits and occupancy expenses from the continued investments in the expansion of the franchise, along with an increase in the provision for unfunded loan commitments. The increase in the provision for unfunded loan commitments was due to the implementation of the CECL methodology, which incorporates a change in the macroeconomic forecast late in the first quarter of 2020 to reflect the pandemic conditions.

Provision for income taxes for Commercial Banking for the first quarter of 2020 was $46.0 million, compared to $35.4 million for the first quarter of 2019. The increase in the provision for income taxes was the result of lower excess tax benefits due to a decrease in stock options exercised by employees.

Wealth Management

The following table presents the operating results of the Bank's Wealth Management segment:

	Quarter Ended March 31,		% Change Quarter Ended March 31,
($ in thousands)	**2020**	**2019**	**2020 vs. 2019**
Net interest income	$ 24,116	$ 22,126	9 %
Noninterest income	145,157	115,859	25 %
Noninterest expense	139,734	114,450	22 %
Income before provision for income taxes	29,539	23,535	26 %
Provision for income taxes	7,089	6,323	12 %
Net income	$ 22,450	$ 17,212	30 %

Net interest income for Wealth Management was $24.1 million for the first quarter of 2020, compared to $22.1 million for the first quarter of 2019. Net interest income is earned from Wealth Management client deposits with the Bank, for which Wealth Management earns a deposit earnings credit and fees earned for Wealth Management sweep deposit accounts. The deposit earnings credit and fees vary based on the amount and type of Wealth Management client deposits. Net interest income increased primarily as a result of growth in Wealth Management client deposits, including sweep deposit accounts.

Wealth Management client deposits totaled $11.0 billion and $8.5 billion at March 31, 2020 and 2019, respectively, including sweep deposits. Wealth Management client deposits, including sweep accounts, averaged $9.4 billion and $7.9 billion for the first quarter of 2020 and 2019, respectively. As noted above, Wealth Management is allocated a deposit earnings credit and fees as net interest income, which is included in the Wealth Management results. Annualized net interest income as a percentage of the average deposits generated by Wealth Management represented 1.03% and 1.14% for the first quarter of 2020 and 2019, respectively.

The allocated earnings credit represents only a portion of the total net interest income generated by these deposits for the Bank. The Bank's holistic approach to generating a full relationship with our clients is reflected in the total impact that these Wealth Management deposits have to the Bank's overall net interest income. The Bank's consolidated net interest margin was 2.74% and 2.97% for the first quarter of 2020 and 2019, respectively. Using this overall net interest margin and the average Wealth Management deposits for each respective period, the Wealth Management deposits, on a consolidated basis, contributed net interest income of approximately $64.2 million for the first quarter of 2020 and $57.7 million for the first quarter of 2019.

Noninterest income for Wealth Management was $145.2 million for the first quarter of 2020, compared to $115.9 million for the first quarter of 2019. The increase was primarily due to higher investment management fees and brokerage and investment fees. Investment management fees vary with the amount of assets managed and the type of services and investments chosen by the client, which are impacted by market conditions. The future level of investment management fees depends on the level and mix of AUM, type of services and investments chosen by the client, market conditions and our ability to attract new clients. Brokerage and investments fees vary based on the volume and type of transaction activity, conditions in the securities markets and our ability to attract new clients.

Noninterest expense for Wealth Management was $139.7 million for the first quarter of 2020, compared to $114.5 million for the first quarter of 2019. The increase was primarily due to higher salaries and benefits, including incentive compensation, as a result of overall growth in our business and the addition of new wealth managers. We continue to expand our client base capabilities in all markets to grow this segment.

AUM and AUA, in aggregate, were $137.9 billion at March 31, 2020, compared to $139.9 billion a year ago, a slight decrease. Our Wealth Management strategy is focused on both managing investment portfolios for our clients and keeping custody of such assets in brokerage accounts at FRSC. By providing multiple services, we are

able to better develop a full Wealth Management and banking relationship, as well as the ability to gather deposits, including sweep accounts. As described above, client deposits from Wealth Management generate net interest income for the Bank. Certain Wealth Management client assets that are held or managed by different areas within our Wealth Management business generate multiple revenue streams for the Bank. As a result of having these multiple revenue streams from certain client assets, such assets are included in more than one type of Wealth Management asset category in the table below. The following table presents the AUM and AUA by the entities comprising our Wealth Management segment:

($ in millions)	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
First Republic Investment Management	$ 60,056	$ 66,029	$ 61,204	$ 61,192	$ 66,675
Brokerage and investment:					
Brokerage	60,189	68,807	63,053	61,583	59,391
Money market mutual funds	6,893	4,268	4,402	3,312	2,818
Total brokerage and investment	67,082	73,075	67,455	64,895	62,209
Trust Company:					
Trust	7,288	7,121	6,366	6,319	5,955
Custody	3,461	4,818	5,210	5,225	5,060
Total Trust Company	10,749	11,939	11,576	11,544	11,015
Total AUM and AUA	$ 137,887	$ 151,043	$ 140,235	$ 137,631	$ 139,899

The following table presents changes in AUM and AUA for our Wealth Management segment. Net client flow includes adding to the balance in existing accounts by the depositing of additional funds and the opening of new accounts, offset by the closing of accounts or the withdrawing of funds. The portion of the net change that cannot be attributed to the deposit or withdrawal of funds is reported in market appreciation (depreciation).

	Quarter Ended March 31,	
($ in millions)	2020	2019
Beginning balance	$ 151,043	$ 126,213
Net client flow	4,954	2,859
Market appreciation (depreciation)	(18,110)	10,827
Ending balance	$ 137,887	$ 139,899

The following table presents a distribution of FRIM's AUM by type of investment:

	% of AUM				
Investment Type	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
Equities	44 %	51 %	49 %	49 %	48 %
Fixed income	32	30	30	29	33
Alternative investments	12	11	12	14	12
Cash and cash equivalents	12	8	9	8	7
Total	100 %	100 %	100 %	100 %	100 %

The following table presents fee income as an annualized percentage of average AUM and AUA for Wealth Management:

	Quarter Ended March 31,	
Fee Income as a Percentage of Average AUM and AUA	**2020**	**2019**
First Republic Investment Management	0.63 %	0.53 %
Brokerage and investment:		
Brokerage	0.08 %	0.04 %
Money market mutual funds	0.23 %	0.36 %
Total brokerage and investment	0.09 %	0.05 %
Trust Company:		
Trust	0.21 %	0.19 %
Custody	0.12 %	0.09 %
Total Trust Company	0.18 %	0.15 %
Total	0.33 %	0.29 %

Balance Sheet Analysis

Investments

The following table presents the investment portfolio:

($ in thousands)	March 31, 2020	December 31, 2019
Debt securities available-for-sale:		
Agency residential MBS	$ 393,358	$ 370,326
Other residential MBS	3,295	4,240
Agency commercial MBS	799,699	860,153
Securities of U.S. states and political subdivisions—taxable	47,446	47,450
Total	$ 1,243,798	$ 1,282,169
Debt securities held-to-maturity:		
U.S. Government-sponsored agency securities	$ 225,000	$ 368,065
Agency residential MBS	2,379,963	2,224,252
Agency commercial MBS	3,166,439	3,296,724
Securities of U.S. states and political subdivisions:		
Tax-exempt municipal securities	10,967,689	10,483,668
Tax-exempt nonprofit debentures	136,654	138,140
Taxable municipal securities	635,096	612,704
Corporate debt securities	24,079	24,080
Total	17,534,920	17,147,633
Less: Allowance for credit losses	(5,087)	—
Debt securities held-to-maturity, net	$ 17,529,833	$ 17,147,633
Equity securities (fair value):		
Mutual funds and marketable equity securities	$ 19,575	$ 19,586

The total combined investment securities portfolio (consisting of available-for-sale, held-to-maturity and equity securities, excluding any allowance for credit losses) represented 15% and 16% of total assets at March 31, 2020 and December 31, 2019, respectively.

The average duration of the available-for-sale portfolio was 3.0 and 3.5 years at March 31, 2020 and December 31, 2019, respectively. The average duration of the held-to-maturity portfolio was 8.1 and 8.3 years at March 31, 2020 and December 31, 2019, respectively.

At March 31, 2020, the tax-exempt and taxable municipal securities had an average credit rating of AA and the portfolio was well-diversified with an average issuer position of approximately $22.4 million. The tax-exempt nonprofit debentures are securities issued through state and local agencies where we have a banking relationship with nonprofit entities. The debentures are reviewed, approved and monitored by our business banking group, similar to business loans.

Allowance for Credit Losses on Debt Securities

The following discussion summarizes the Bank's methodology for determining its allowance for credit losses on debt securities. For a complete description of the related accounting policies, see Note 1 and Note 3 in "Item 1. Financial Statements."

Beginning January 1, 2020, an allowance for credit losses is recorded for held-to-maturity debt securities, and represents the portion of the amortized cost that the Bank does not expect to collect over the life of the securities. The Bank also evaluates available-for-sale debt securities that experienced a decline in fair value below amortized cost for credit impairment. Prior to January 1, 2020, for both available-for-sale and held-to-maturity debt securities that experienced a decline in fair value below amortized cost, an other-than-temporary impairment analysis was performed to determine if a write down to the security was necessary due to impairment.

As of March 31, 2020, the Bank had no allowance for credit losses for available-for-sale debt securities.

The allowance for credit losses for held-to-maturity debt securities totaled $5.1 million as of March 31, 2020, and is determined using a quantitative probability of default/loss given default model to forecast credit losses for securities of U.S. states and political subdivisions (including tax-exempt municipal securities, tax-exempt nonprofit debentures and taxable municipal securities). The Bank's estimate incorporates the security's characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of the securities. The Bank's allowance for credit losses for corporate debt securities is based on, among other factors, the financial condition of the issuer and structure of the security.

The following table presents the activity in the allowance for credit losses for held-to-maturity debt securities:

	Allowance for Credit Losses				
	Quarter Ended March 31, 2020				
($ in thousands)	Balance at Beginning of Period [(1)]	Provision	Charge-offs	Recoveries	Balance at End of Period
Debt securities held-to-maturity:					
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	$ 4,432	$ 272	$ —	$ —	$ 4,704
Tax-exempt nonprofit debentures	100	132	—	—	232
Taxable municipal securities	127	14	—	—	141
Corporate debt securities	10	—	—	—	10
Total	$ 4,669	$ 418	$ —	$ —	$ 5,087

(1) Represents the allowance for credit losses after the transition adjustments from the adoption of CECL.

Loan Portfolio

The following table presents the Bank's loan portfolio, allowance for credit losses and loans held for sale:

($ in millions)	March 31, 2020	December 31, 2019 [1]
Residential real estate		
Single family (1-4 units)	$ 49,063	$ 47,986
Home equity lines of credit	2,704	2,501
Single family construction	779	762
Total residential real estate	52,546	51,249
Income property		
Multifamily (5+ units)	12,823	12,353
Commercial real estate	7,715	7,449
Multifamily/commercial construction	1,840	1,696
Total income property	22,378	21,498
Business		
Capital call lines of credit	7,512	5,571
Tax-exempt	3,088	3,042
Other business	3,095	3,034
Total business	13,695	11,647
Other		
Stock secured	1,920	1,898
Other secured	1,532	1,433
Unsecured	3,214	3,072
Total other	6,666	6,403
Total loans held for investment	95,285	90,797
Less: Allowance for credit losses	(542)	(496)
Loans, net	94,743	90,301
Loans held for sale	355	23
Total	$ 95,098	$ 90,324

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The following table presents an analysis of our loan portfolio at March 31, 2020, by major geographic location:

($ in millions)	San Francisco Bay Area	New York Metro Area	Los Angeles Area	Boston Area	San Diego Area	Other California Areas	Other	Total	%
Residential real estate									
Single family (1-4 units) [(1)]	$19,914	$10,272	$8,582	$5,076	$1,474	$454	$3,646	$49,418	52 %
Home equity lines of credit	1,072	455	553	289	72	20	243	2,704	3
Single family construction	272	144	242	39	24	9	49	779	1
Total residential real estate	21,258	10,871	9,377	5,404	1,570	483	3,938	52,901	56
Income property									
Multifamily (5+ units)	5,071	2,721	2,249	415	1,274	365	728	12,823	13
Commercial real estate	3,258	1,532	1,471	306	213	218	717	7,715	8
Multifamily/commercial construction	375	327	777	14	74	6	267	1,840	2
Total income property	8,704	4,580	4,497	735	1,561	589	1,712	22,378	23
Business									
Capital call lines of credit	2,959	2,160	510	532	—	—	1,351	7,512	8
Tax-exempt	864	610	756	391	211	2	254	3,088	3
Other business	1,209	606	493	134	172	18	463	3,095	3
Total business	5,032	3,376	1,759	1,057	383	20	2,068	13,695	14
Other									
Stock secured	384	187	453	172	80	64	580	1,920	2
Other secured	301	622	50	193	6	1	359	1,532	2
Unsecured	869	856	691	301	144	55	298	3,214	3
Total other	1,554	1,665	1,194	666	230	120	1,237	6,666	7
Total	$36,548	$20,492	$16,827	$7,862	$3,744	$1,212	$8,955	$95,640	100 %
% by location at March 31, 2020	38 %	21 %	18 %	8 %	4 %	1 %	10 %	100 %	
% by location at December 31, 2019	39 %	21 %	18 %	8 %	4 %	1 %	9 %	100 %	

(1) Includes loans held for sale.

At March 31, 2020 and December 31, 2019, approximately 50% and 51%, respectively, of total loans were secured by real estate properties located in California. Future economic or political conditions, natural disasters, disruptions and instability caused by COVID-19 or other developments in California could adversely affect the value of real estate secured mortgage loans.

The Bank's loan portfolio includes: (1) adjustable-rate loans tied to Prime, LIBOR, COFI, and other reference rates such as 12-month average of 1-year CMT, which are currently adjustable; (2) hybrid-rate loans, for which the initial rate is fixed for a period from one year to as many as ten years, and thereafter the rate becomes adjustable; and (3) fixed-rate loans, for which the interest rate does not change through the life of the loan. The following table presents our loan portfolio at March 31, 2020, by rate type:

	Adjustable Rate							
($ in millions)	Prime	LIBOR	COFI	Other	Total	Hybrid Rate	Fixed Rate	Total
Residential real estate								
Single family (1-4 units) [1]	$ 168	$ 2,209	$ 2,646	$ 158	$ 5,181	$ 36,997	$ 7,240	$ 49,418
Home equity lines of credit	2,696	5	—	—	2,701	—	3	2,704
Single family construction	43	—	—	—	43	—	736	779
Total residential real estate	2,907	2,214	2,646	158	7,925	36,997	7,979	52,901
Income property								
Multifamily (5+ units)	260	393	2,003	122	2,778	6,078	3,967	12,823
Commercial real estate	298	342	418	15	1,073	2,676	3,966	7,715
Multifamily/commercial construction	832	161	—	10	1,003	25	812	1,840
Total income property	1,390	896	2,421	147	4,854	8,779	8,745	22,378
Business								
Capital call lines of credit	5,896	1,089	—	—	6,985	—	527	7,512
Tax-exempt	38	254	—	—	292	254	2,542	3,088
Other business	1,217	220	10	7	1,454	155	1,486	3,095
Total business	7,151	1,563	10	7	8,731	409	4,555	13,695
Other								
Stock secured	420	859	—	613	1,892	—	28	1,920
Other secured	544	701	—	79	1,324	2	206	1,532
Unsecured	470	39	—	8	517	—	2,697	3,214
Total other	1,434	1,599	—	700	3,733	2	2,931	6,666
Total	$ 12,882	$ 6,272	$ 5,077	$ 1,012	$ 25,243	$ 46,187	$ 24,210	$ 95,640
% by rate type at March 31, 2020	14 %	7 %	5 %	1 %	27 %	48 %	25 %	100 %
% by rate type at December 31, 2019	11 %	7 %	6 %	1 %	25 %	50 %	25 %	100 %

[1] Includes loans held for sale.

At March 31, 2020, included in the hybrid-rate and fixed-rate loan portfolios are $3.6 billion, or 4% of the total loan portfolio, that either (1) mature within one year; (2) are within one year of adjusting from the initial fixed-rate period; or (3) are committed for sale.

Many of our loan products determine the amount of interest by reference to certain benchmark rates or indices. The Financial Conduct Authority ("FCA"), which regulates LIBOR, has announced that it will no longer compel banks to submit rates for the calculation of LIBOR after December 31, 2021. In addition, the Federal Home Loan Bank of San Francisco has announced that it will no longer calculate and publish COFI after January 2022. The Bank ceased offering new loans indexed to LIBOR in the first half of 2019 (with some limited exceptions for business loans) and to COFI in the first half of 2018 and the Bank has a transition plan in place with respect to existing loans indexed to LIBOR and COFI. In lieu of LIBOR or COFI, new loan originations are currently indexed to Prime or a 12-month average of 1-year CMT.

Residential real estate

Residential real estate includes single family, HELOCs and single family construction loans.

Single Family

Our single family loans include loans that have an initial interest-only period. Subsequent to the initial interest-only period, these loans fully and evenly amortize until maturity. Underwriting standards for all such loans require substantial borrower net worth, substantial post-loan liquidity, excellent credit scores and significant down payments. As part of our underwriting standards, we verify the ability of the borrowers to repay our loans. At March 31, 2020, approximately $32.6 billion, or 66%, of the unpaid principal balance of our single family loan portfolio, including loans held for sale, fully and evenly amortize until maturity following an initial interest-only period of generally ten years. Such loans were $31.7 billion, or 66%, of the unpaid principal balance of our single family loan portfolio, at December 31, 2019. At March 31, 2020, loans of this type had a weighted average LTV of approximately 56%, based on appraised value at the time of origination, and had credit scores averaging 763 at origination. At March 31, 2020, interest-only home loans with an LTV at origination of more than 80% comprised less than 1% of the unpaid principal balance of our single family loan portfolio, including loans held for sale.

The following table presents additional LTV information at origination for all single family loans, including loans held for sale:

	March 31, 2020	
($ in thousands)	**Unpaid Principal Balance**	**% of Total**
LTV at Origination		
Less than or equal to 60%	$ 25,943,250	52.7 %
Greater than 60% to 70%	15,383,796	31.2
Greater than 70% to 80%	7,458,645	15.2
Greater than 80%	443,428	0.9
Total	$ 49,229,119	100.0 %

We do not originate single family loans with the characteristics generally described as "subprime" or "high cost." Subprime loans are typically made to borrowers with little or no cash reserves and poor or limited credit. Often, subprime loans are underwritten using limited documentation. Over the past two years, the single family loans originated by us had a weighted average credit score of 767, and all of our home loans were underwritten using full documentation.

HELOCs

Our single family HELOC product requires the payment of interest each month on the outstanding balance. During the first ten years of the loan term, principal amounts may be repaid or drawn at the borrower's option; thereafter, the unpaid principal balance fully and evenly amortizes over a period of fifteen years. We underwrite HELOCs based on the same standards as single family home loans. As a result, our delinquency and loss experience on HELOCs has been similar to the experience for single family loans.

For HELOCs that are in second lien position, the LTVs in the table below are presented on a combined LTV ("CLTV") basis, including the total HELOC commitment and any balance on a first residential mortgage. As of March 31, 2020, approximately 38% of HELOCs are in first lien position, and approximately 45% of HELOCs are in second lien position behind a first residential mortgage originated by us, including loans subsequently sold to investors.

The following table presents CLTV information at origination for HELOCs, including both the unpaid principal balance and total commitment:

($ in thousands)	March 31, 2020		
	Unpaid Principal Balance	Total Commitment	% of Unpaid Principal Balance
CLTV at Origination			
Less than or equal to 60%	$ 1,712,018	$ 5,621,753	64.0 %
Greater than 60% to 70%	694,198	1,835,412	25.9
Greater than 70% to 80%	265,678	611,109	9.9
Greater than 80%	4,649	9,153	0.2
Total	$ 2,676,543	$ 8,077,427	100.0 %

Single Family Construction

Our single family construction loan portfolio includes loans to individual clients for the construction and ownership of single family homes, primarily in our California and New York markets. These loans are typically disbursed as construction progresses, carry interest rates that vary with the prime rate and can be converted into a permanent mortgage loan once the property is occupied. At March 31, 2020 and December 31, 2019, the unpaid principal balance of single family construction loans was $782.5 million and $764.9 million, respectively.

Income property

Income property includes multifamily, commercial real estate and multifamily/commercial construction loans.

Multifamily

The following table presents the unpaid principal balance of all multifamily loans and multifamily loans (excluding lines of credit), including loans held for sale, for which interest-only payments may be made for a period of up to ten years, depending upon the borrower, specific underwriting criteria and terms of the loans:

($ in thousands)	Unpaid Principal Balance	
	March 31, 2020	December 31, 2019 [(1)]
Multifamily (5+ units) [(2)]	$ 12,831,014	$ 12,380,190
Multifamily (5+ units)—interest-only [(2), (3)]	$ 5,607,165	$ 5,423,180

[(1)] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.
[(2)] Includes loans held for sale.
[(3)] Excludes lines of credit.

At March 31, 2020, interest-only multifamily loans (excluding lines of credit) had a weighted average LTV of 52% based on the appraised value at the time of origination.

Additionally, certain multifamily lines of credit allow for interest-only payments for an initial period. The following table presents the unpaid principal balance, total commitment and percentage of interest-only lines of credit secured by the equity in multifamily real estate:

	March 31, 2020			December 31, 2019 [(1)]		
($ in thousands)	Unpaid Principal Balance	Total Commitment	% of Total Multifamily	Unpaid Principal Balance	Total Commitment	% of Total Multifamily
Multifamily lines of credit (5+ units)—interest-only	$ 155,487	$ 385,205	1.2 %	$ 144,325	$ 396,530	1.2 %

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

Commercial Real Estate

The following table presents the unpaid principal balance of all commercial real estate loans and commercial real estate loans (excluding lines of credit) for which interest-only payments may be made for a period of up to ten years, depending upon the borrower, specific underwriting criteria and terms of the loans:

	Unpaid Principal Balance	
($ in thousands)	March 31, 2020	December 31, 2019 [(1)]
Commercial real estate	$ 7,723,827	$ 7,458,703
Commercial real estate—interest-only [(2)]	$ 2,462,989	$ 2,260,225

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.
(2) Excludes lines of credit.

At March 31, 2020, interest-only commercial real estate loans (excluding lines of credit) that allow for interest-only payments had a weighted average LTV of 45% based on the appraised value at the time of origination.

Additionally, certain commercial real estate lines of credit allow for interest-only payments for an initial period. The following table presents the unpaid principal balance, total commitment and percentage of interest-only lines of credit secured by the equity in commercial real estate:

	March 31, 2020			December 31, 2019 [(1)]		
($ in thousands)	Unpaid Principal Balance	Total Commitment	% of Total Commercial Real Estate	Unpaid Principal Balance	Total Commitment	% of Total Commercial Real Estate
Commercial real estate lines of credit—interest-only	$ 213,417	$ 503,486	2.8 %	$ 189,708	$ 483,258	2.5 %

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

As discussed in "Balance Sheet Analysis—Asset Quality," the Bank has limited exposure to the areas directly impacted by COVID-19, such as the retail, hotel and restaurant industries. The total unpaid principal balance of these loans was approximately $2.4 billion, and represented 2.5% of our loan portfolio as of March 31, 2020.

Multifamily/Commercial Construction

Our multifamily/commercial construction loan portfolio includes loans for the construction and ownership of other types of properties other than owner-occupied single family homes. These loans are typically disbursed as construction progresses, carry interest rates that vary with the prime rate and can be converted into a permanent mortgage loan once the property is occupied. At March 31, 2020 and December 31, 2019, the unpaid principal balance of multifamily/commercial construction loans was $1.9 billion and $1.7 billion, respectively.

Business

Business loans include capital call lines of credit, tax-exempt, and other business loans. Business loans provide funding for investment opportunities, bridge capital calls from investors, and meet the working capital cash flow requirements and various other financing needs of our business and non-profit clients.

The business loan portfolio is comprised primarily of capital call lines to private equity and venture capital funds, and loans to independent schools and other non-profit organizations, which include social service organizations, the performing arts, museums, historical societies and community foundations. In addition, we provide operating lines of credit and term loans to other business clients to meet their working capital needs. The following table presents the amortized cost and total commitment for business loans by type:

	March 31, 2020		December 31, 2019	
($ in thousands)	Amortized Cost	Total Commitment	Amortized Cost	Total Commitment
Private Equity/Venture Capital Funds	$ 7,717,194	$ 17,096,244	$ 5,730,335	$ 15,529,658
Schools/Non-profit Organizations	3,481,900	4,278,111	3,437,471	4,229,283
Investment Firms	434,440	1,134,641	467,295	988,643
Real Estate Related Entities	546,585	926,174	540,870	904,076
Professional Service Firms	217,297	423,430	188,794	438,278
Aviation/Marine	356,151	362,281	361,696	372,603
Vineyards/Wine	173,439	246,003	185,408	258,205
Clubs and Membership Organizations	157,114	241,826	147,104	235,096
Entertainment Industry	25,856	104,080	29,045	108,542
Other	584,928	838,364	558,798	893,431
Total	$ 13,694,904	$ 25,651,154	$ 11,646,816	$ 23,957,815

The following table presents the unpaid principal balance, total commitment and utilization percentages for business lines of credit by type:

	Lines of Credit					
	March 31, 2020			December 31, 2019		
($ in thousands)	Unpaid Principal Balance	Total Commitment	Utilization Percentage	Unpaid Principal Balance	Total Commitment	Utilization Percentage
Private Equity/Venture Capital Funds	$ 7,458,545	$ 16,830,772	44.3 %	$ 5,481,904	$ 15,275,057	35.9 %
Schools/Non-profit Organizations	292,339	1,086,132	26.9 %	296,089	1,085,330	27.3 %
Investment Firms	227,814	927,209	24.6 %	250,673	771,744	32.5 %
Real Estate Related Entities	251,674	629,884	40.0 %	245,720	607,478	40.4 %
Professional Service Firms	99,674	305,725	32.6 %	76,275	325,654	23.4 %
Vineyards/Wine	62,202	134,549	46.2 %	59,648	132,191	45.1 %
Clubs and Membership Organizations	39,477	123,928	31.9 %	31,923	119,638	26.7 %
Entertainment Industry	26,240	103,511	25.3 %	29,534	108,094	27.3 %
Aviation/Marine	5,667	11,138	50.9 %	933	11,139	8.4 %
Other	229,896	482,533	47.6 %	178,929	513,879	34.8 %
Total	$ 8,693,528	$ 20,635,381	42.1 %	$ 6,651,628	$ 18,950,204	35.1 %

Included within business lines of credit are capital call lines of credit, which are credit facilities that enable private equity and venture capital funds to bridge the timing between funding investments and receiving funds from limited partner capital calls. As of March 31, 2020, the unpaid principal balance and total commitment for capital call lines of credit was $7.3 billion and $16.5 billion, respectively, resulting in a utilization rate for these lines of credit of 44.2% at March 31, 2020.

The following table presents the unpaid principal balance of business term loans by type:

	Term Loans Unpaid Principal Balance	
($ in thousands)	March 31, 2020	December 31, 2019
Schools/Non-profit Organizations	$ 3,191,979	$ 3,143,953
Aviation/Marine	351,143	361,464
Real Estate Related Entities	296,290	296,598
Private Equity/Venture Capital Funds	265,472	254,601
Investment Firms	207,432	216,899
Clubs and Membership Organizations	117,898	115,458
Professional Service Firms	117,705	112,624
Vineyards/Wine	111,454	126,014
Entertainment Industry	569	448
Other	355,831	379,552
Total	$ 5,015,773	$ 5,007,611

Other

Other loans include stock secured, other secured and unsecured loans.

Stock Secured

At both March 31, 2020 and December 31, 2019, the unpaid principal balance of stock secured loans was $1.9 billion. As of March 31, 2020, there were additional undisbursed commitments of $3.6 billion related to stock secured loans.

Other Secured

At March 31, 2020 and December 31, 2019, the unpaid principal balance of other secured loans was $1.5 billion and $1.4 billion, respectively. As of March 31, 2020, there were additional undisbursed commitments of $1.5 billion related to other secured loans. These loans primarily consist of loans from the professional loan program, which offer individuals an ability to borrow for capital and partnership requirements. As of March 31, 2020, we had outstanding loans from the professional loan program of $1.4 billion and undisbursed commitments of $1.5 billion.

Unsecured

At March 31, 2020 and December 31, 2019, the unpaid principal balance of unsecured loans was $3.2 billion and $3.1 billion, respectively. As of March 31, 2020, these amounts include unsecured lines of credit of $422.7 million. In addition, undisbursed commitments for unsecured lines of credit totaled $677.6 million as of March 31, 2020. Unsecured lines of credit are originated to meet the non-mortgage needs of our clients. Such loans generally have a shorter term to maturity, are adjustable with the prime rate or LIBOR and are subject to annual or more frequent review.

In addition, unsecured loans include household debt refinance loans, which are made primarily to individuals for refinancing existing education debt at competitive fixed rates. At March 31, 2020 and December 31, 2019, the unpaid principal balance of such loans was $2.7 billion and $2.6 billion, respectively.

Lines of Credit

The following table presents the utilization percentages for lines of credit by type:

	Utilization Percentage	
Lines of Credit by Type	**March 31, 2020**	**December 31, 2019**
Home equity lines of credit	32.6 %	30.3 %
Single family construction	54.4 %	52.2 %
Multifamily (5+ units)	48.7 %	46.9 %
Commercial real estate	54.3 %	53.0 %
Multifamily/commercial construction	49.9 %	52.9 %
Capital call lines of credit	44.2 %	35.4 %
Tax-exempt	29.5 %	31.4 %
Other business	34.3 %	34.1 %
Stock secured	34.6 %	37.2 %
Other secured	43.8 %	45.9 %
Unsecured	38.4 %	35.1 %

Loan Originations

Our strategy is to originate relationship-based loans. While we emphasize loans secured by single family residences, we also selectively originate multifamily mortgages, commercial real estate mortgages and other loans, including business loans. Some single family loans are originated for sale in the secondary market. From the inception of our predecessor institution in mid-1985 through March 31, 2020, we have originated approximately $277 billion of loans, of which approximately $35 billion have been sold to investors.

Loan originations include newly originated loans, newly originated lines of credit (based on total commitment), refinanced loans and increases in loan commitment amounts resulting from loan modifications. Total loan originations were $10.3 billion for the first quarter of 2020, compared to $6.5 billion for the first quarter of 2019, an increase of 59%. The increase in loan originations was primarily due to increases in single family, business, multifamily/commercial construction and stock secured lending. The volume and type of loan originations depend on the level of interest rates, the demand for loans in our markets and other economic conditions.

We focus on originating specific loan types in our primary markets. The majority of our mortgage loans are secured by properties located in close proximity to one of our offices. The following table presents loan originations:

($ in thousands)	Quarter Ended March 31, 2020	Quarter Ended March 31, 2019 [(1)]
Residential real estate		
Single family (1-4 units)	$ 3,519,336	$ 2,189,895
Home equity lines of credit	395,508	352,138
Single family construction	109,162	124,269
Total residential real estate	4,024,006	2,666,302
Income property		
Multifamily (5+ units)	781,303	582,943
Commercial real estate	451,858	246,528
Multifamily/commercial construction	620,921	130,113
Total income property	1,854,082	959,584
Business		
Capital call lines of credit	2,385,229	1,702,723
Tax-exempt	100,019	84,425
Other business	619,779	255,999
Total business	3,105,027	2,043,147
Other		
Stock secured	592,560	206,713
Other secured	413,824	266,749
Unsecured	322,888	334,308
Total other	1,329,272	807,770
Total loans originated	$ 10,312,387	$ 6,476,803

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

The following table presents the weighted average LTVs for new loans secured by real estate originated during each of the periods indicated based on the appraised value at the time of origination. The single family loan category also includes loans originated and subsequently sold to investors.

LTVs for New Originations	Quarter Ended March 31, 2020	December 31, 2019 [(1)]	September 31, 2019 [(1)]	June 30, 2019 [(1)]	March 31, 2019 [(1)]
Single family (1-4 units)	57 %	56 %	58 %	60 %	59 %
Home equity lines of credit [(2)]	51 %	52 %	52 %	52 %	52 %
Single family construction	57 %	53 %	55 %	58 %	52 %
Multifamily (5+ units)	54 %	49 %	53 %	55 %	51 %
Commercial real estate	49 %	43 %	44 %	46 %	38 %
Multifamily/commercial construction	51 %	55 %	56 %	56 %	54 %

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.
(2) Presented on a CLTV basis, including the first residential mortgage and a second lien, where applicable.

The weighted average LTVs in all categories have remained consistent and conservative over the periods and are indicative of the high quality of the Bank's underwriting standards.

The following table presents the weighted average credit scores for home loans originated during each of the periods indicated. The single family loan category also includes loans originated and subsequently sold to investors.

	Quarter Ended				
Weighted Average Credit Scores	**March 31, 2020**	**December 31, 2019**	**September 30, 2019**	**June 30, 2019**	**March 31, 2019**
Single family (1-4 units)	765	767	767	767	765
Home equity lines of credit	768	765	762	766	764

The following table presents purchase loans and refinance loans as a percentage of total single family mortgage originations (excluding HELOCs) for each of the periods indicated:

	Quarter Ended				
Purchase and Refinance Composition	**March 31, 2020**	**December 31, 2019**	**September 30, 2019**	**June 30, 2019**	**March 31, 2019**
Purchase loans	31 %	28 %	37 %	52 %	50 %
Refinance loans	69	72	63	48	50
Total	100 %	100 %	100 %	100 %	100 %

Portfolio LTVs

We have approved a limited group of third-party appraisers to appraise all of the properties on which we make loans. Certain larger single family loans require two appraisals (with the lower value used for underwriting purposes). Our practice is to seldom exceed an 80% LTV on single family loans and an 80% CLTV on HELOCs. LTV ratios generally decline as the size of the loan increases. At origination, we generally do not exceed a 75% LTV on multifamily loans and a 70% LTV on commercial real estate loans.

The following table presents the weighted average LTVs based on the appraised value at the time of origination for our entire portfolio of loans secured by real estate at the dates indicated:

	Quarter Ended				
Portfolio LTVs	**March 31, 2020**	**December 31, 2019 [1]**	**September 30, 2019 [1]**	**June 30, 2019 [1]**	**March 31, 2019 [1]**
Single family (1-4 units) [2]	58 %	58 %	58 %	58 %	58 %
Home equity lines of credit [3]	51 %	51 %	52 %	52 %	52 %
Single family construction	57 %	57 %	57 %	57 %	57 %
Multifamily (5+ units) [2]	52 %	51 %	51 %	51 %	51 %
Commercial real estate	47 %	47 %	47 %	47 %	47 %
Multifamily/commercial construction	53 %	54 %	54 %	54 %	53 %

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[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

[2] Includes loans held for sale.

[3] Presented on a CLTV basis, including the first residential mortgage and a second lien, where applicable.

We either retain originated home loans in our loan portfolio or sell the loans in whole loan or loan participation arrangements, either in the secondary market or in loan securitizations. Loan sales are highly dependent upon market conditions. We have retained in our loan portfolio both ARMs and intermediate-fixed rate loans. As interest rates rise, payments on ARMs increase, which may be financially burdensome to some borrowers and could increase the risk of default. Subject to market conditions, our ARMs generally provide for a life cap that is 5% to 9% above the initial interest rate, thereby protecting borrowers from unlimited interest rate increases. As part of our standard underwriting guidelines, borrowers undergo a qualification process for an ARM loan assuming an interest rate that is higher than the initial rate.

Asset Quality

We place an asset on nonaccrual status when any installment of principal or interest is 90 days or more past due (except for single family loans that are well secured and in the process of collection) or when management determines the ultimate collection of all contractually due principal or interest to be unlikely. Restructured loans for which we grant payment or interest rate concessions because of a borrower's financial difficulties ("troubled debt restructurings") are placed on nonaccrual status until collectibility improves and a satisfactory payment history is established, generally by the receipt of at least six consecutive timely payments. The CARES Act allows us to make modifications of certain loans where the borrower has been affected by COVID-19 without such modifications being considered troubled debt restructurings. See "Key Factors Affecting Our Business and Financial Statements—Recent Developments from COVID-19—Loan Modifications."

Our collection policies are highly focused with respect to both our portfolio loans and loans serviced for others. We have policies requiring prompt notification of delinquency and initiation of corrective measures. Our practice is to attempt to resolve problem assets quickly, including (as appropriate) collections, modifications, pursuit of foreclosure, or the sale of such problem assets as rapidly as possible at prices available in the prevailing market. For certain properties, we may make repairs and engage management companies in order to reach stabilized levels of occupancy prior to asset disposition. We believe our collection and foreclosure procedures comply with all applicable laws and regulations. We currently have a low level of loans in foreclosure. The CARES Act and other current and pending state and local legislation and regulations contain limitations on foreclosure actions; we are complying with the limitations imposed under such legislation and regulations.

The Bank has limited exposure to the areas directly impacted by COVID-19, such as the retail, hotel and restaurant industries. The total unpaid principal balance of these loans represented 2.5% of our loan portfolio as of March 31, 2020. As of April 30, 2020, there were approximately $392 million of completed modifications and $193 million of modifications in process for borrowers impacted by COVID-19 in these industries. The Bank does not have automobile loans, credit card loans, and does not lend to oil and gas companies, casinos, airlines or most other travel-related businesses. The following table presents the unpaid principal balance and the weighted average LTVs based on the appraised value at the time of origination for loans to borrowers in retail, hotel and restaurant industries at March 31, 2020:

	March 31, 2020	
($ in thousands)	**Unpaid Principal Balance**	**LTV**
Retail	$ 1,757,718	50 %
Hotel	420,052	48 %
Restaurant [1]	220,106	52 %
Total	$ 2,397,876	

[1] Approximately 70% of loans to restaurants are real-estate secured.

The following table presents nonaccrual loans, other real estate owned, restructured accruing loans and accruing loans 90 days or more past due, as well as the ratio of nonperforming assets to total assets:

($ in thousands)	March 31, 2020	December 31, 2019 [1]
Nonaccrual loans:		
Residential real estate		
Single family (1-4 units)	$ 54,189	$ 59,013
Home equity lines of credit	9,833	11,158
Total residential real estate	64,022	70,171
Income property		
Multifamily/commercial construction	57,881	68,856
Business		
Other business	2,198	2,721
Other		
Stock secured	252	—
Other secured	23	23
Unsecured	1,042	1,410
Total other	1,317	1,433
Total nonaccrual loans	125,418	143,181
Other real estate owned	1,071	—
Total nonperforming assets	$ 126,489	$ 143,181
Nonperforming assets to total assets	0.10 %	0.12 %
Restructured accruing loans	$ 13,418	$ 13,287
Accruing loans 90 days or more past due	$ —	$ —

(1) For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

See Note 4 in "Item 1. Financial Statements" for information related to interest income on nonaccrual loans for the quarters ended March 31, 2020 and 2019.

Of the loans on nonaccrual status, $89.8 million were current at March 31, 2020, compared to $125.0 million at December 31, 2019. Nonaccrual loans at March 31, 2020 include one lending relationship totaling $61.9 million, consisting of single family and non-owner occupied single family construction loans.

The future level of nonperforming assets depends upon a number of factors, including the performance of borrowers under loan terms, the impact of COVID-19 on borrowers and on global and local economies, the timing of the sale of future other real estate owned properties and economic conditions nationally and in our primary markets.

Allowance for Credit Losses

The following discussion summarizes the Bank's methodology for determining its allowance for credit losses. For a complete description of the related accounting policies, see Note 1 and Note 4 in "Item 1. Financial Statements."

Allowance for Credit Losses for the Quarter Ended March 31, 2020

Beginning January 1, 2020, the Bank estimates its allowance for credit losses using quantitative models, expert judgment, qualitative factors and individual assessments. The estimate incorporates individual loan level characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of the Bank's loans. Loans with similar risk characteristics within each class are pooled when developing the allowance, and loans that do not share similar risk characteristics are individually assessed.

Allowance for Credit Losses for the Quarter Ended March 31, 2019

Prior to January 1, 2020, our allowance for credit losses reflects the inherent risk of probable losses, based upon established criteria, including the type of loan, loan characteristics, our and the industry's historical loss experience, and economic trends. Our allowance for credit losses methodology, which includes loans collectively evaluated for estimated losses, qualitative reserves and individually assessed loans, requires management's consideration of a number of factors.

The following table presents an analysis of our allowance for credit losses, including provisions for credit losses, charge-offs and recoveries:

	At or for the Quarter Ended March 31,	
($ in thousands)	2020	2019 [1]
Allowance for credit losses:		
Balance at beginning of period [2]	$ 494,429	$ 439,048
Provision	47,679	14,200
Charge-offs:		
Single family (1-4 units)	(89)	(3)
Home equity lines of credit	(6)	—
Single family construction	—	—
Multifamily (5+ units)	—	—
Commercial real estate	—	—
Multifamily/commercial construction	—	—
Capital call lines of credit	—	—
Tax-exempt	—	—
Other business	—	—
Stock secured	—	—
Other secured	—	—
Unsecured	(249)	(254)
Total charge-offs	(344)	(257)
Recoveries:		
Single family (1-4 units)	17	58
Home equity lines of credit	18	23
Multifamily (5+ units)	—	—
Commercial real estate	—	—
Single family construction	—	—
Multifamily/commercial construction	—	—
Capital call lines of credit	—	—
Tax-exempt	—	—
Other business	18	21
Stock secured	—	—
Other secured	—	—
Unsecured	89	28
Total recoveries	142	130
Net loan charge-offs	(202)	(127)
Balance at end of period	$ 541,906	$ 453,121
Average total loans for the period	$ 92,213,125	$ 76,192,261
Total loans at period end	$ 95,285,062	$ 77,265,097
Total nonaccrual loans	$ 125,418	$ 51,081
Ratios:		
Net charge-offs to:		
Average total loans (annualized)	0.00 %	0.00 %
Allowance for credit losses to:		
Total loans	0.57 %	0.59 %
Nonaccrual loans	432.1 %	887.1 %

[1] For comparability, the Bank has adjusted certain prior period amounts to conform to the current period presentation under CECL.

[2] Represents the allowance for credit losses after the transition adjustments from the adoption of CECL for the quarter ended March 31, 2020.

Mortgage Banking Activities

In addition to originating loans for our own portfolio, we conduct mortgage banking activities. We have sold whole loans and participations in loans in the secondary market and in loan securitizations. We originate, on a direct flow basis, single family mortgages that are priced and underwritten to conform to previously agreed-upon criteria prior to loan funding and are delivered to the investor shortly after funding. We have also identified secondary market sources that seek to acquire loans of the type we originate for our loan portfolio.

The following table presents information on single family loans originated, loans sold and gain on sale of loans:

	Quarter Ended March 31,	
($ in thousands)	2020	2019
Single family loans originated	$ 3,519,336	$ 2,189,895
Loans sold:		
Flow sales:		
Agency	$ 25,774	$ 11,679
Non-agency	31,870	16,831
Total flow sales	57,644	28,510
Bulk sales:		
Non-agency	437,669	152,119
Total loans sold	$ 495,313	$ 180,629
Gain on sale of loans:		
Amount	$ 1,925	$ 359
Gain as a percentage of loans sold	0.39 %	0.20 %

The level of loan originations, loan sales and gain on loan sales depend upon market conditions and the interest rate environment, as well as our pricing and asset/liability management strategies. The higher level of gain on sale of loans for the first quarter of 2020 compared to a year ago was primarily the result of a higher volume of loans sold and higher margins. The level of future loan originations, loan sales and gain on loan sales will depend on overall credit availability, the interest rate environment, the strength of the general economy, local real estate markets and the housing industry, and conditions in the secondary loan sale market. These factors have been, and will likely continue to be, affected by COVID-19.

In connection with loan sales, we retain all the loan servicing in order to maintain the primary contact with our clients and to generate recurring fee income. We retain MSRs on loans that we sell to institutional investors and governmental agencies. We generally do not provide any financial or performance guarantees to the investors who purchase our loans and the purchasers do not have any recourse to the Bank on the loans that we have sold. In accordance with secondary market standards, we make customary representations and warranties related to the origination and documentation of sold loans. We have not been required to make any significant loan repurchases or incur any other significant costs subsequent to the sale of loans for any breach of these customary representations and warranties.

As of March 31, 2020, the Bank has an obligation to reimburse Federal Home Loan Mortgage Corporation ("Freddie Mac") for losses up to $30.2 million, or 12% of the multifamily loans securitized in 2018. As of March 31, 2020, the weighted average LTV of those loans was 56% based on the appraised value at the time of origination. The liability for estimated losses related to this reimbursement obligation was only $195,000 at March 31, 2020, and the Bank has experienced no cumulative losses on the loans within this securitization through March 31, 2020. The remaining unpaid principal balance of multifamily loans securitized was $132.3 million at March 31, 2020, a decrease compared to $173.1 million at December 31, 2019.

The following table presents information on loans serviced for others and net loan servicing fees:

	At or for the Quarter Ended March 31,	
($ in thousands)	2020	2019
Loans serviced for others	$ 9,203,192	$ 11,325,895
Loan servicing fees, net	$ 1,652	$ 3,788

Mortgage loans serviced for investors decreased to $9.2 billion at March 31, 2020, from $11.3 billion at March 31, 2019, due to repayments in the servicing portfolio exceeding loan sales over the past twelve months. MSRs are recognized as separate assets on our balance sheet and are reported at the lower of amortized cost or fair value. At March 31, 2020, MSRs were $41.7 million (45 basis points of loans serviced), compared to $52.7 million (47 basis points of loans serviced) at March 31, 2019.

Our loan origination policies and consistent underwriting standards have resulted in a low historical loan loss experience on single family loans sold in the secondary market. Since our inception in 1985, we have experienced cumulative net loan losses of only $9.6 million on single family loans sold. At March 31, 2020, single family loans serviced for investors that are 90 days or more past due were $7.1 million, or 8 basis points of such loans serviced.

Deposit Gathering

We obtain funds from depositors by offering consumer and business checking, money market and passbook accounts, and term CDs. Our accounts are federally insured by the FDIC up to the maximum limit. At March 31, 2020, our total deposits were $93.7 billion, a 4% increase from $90.1 billion at December 31, 2019, as we continued to expand relationships with existing clients and acquire new deposit clients, both business and consumer.

Core deposits, which include checking accounts, money market accounts, savings accounts and CDs (excluding CDs greater than $250,000 and all brokered deposits), provide a stable source of low cost funding. Core deposits totaled $84.8 billion and $81.4 billion at March 31, 2020 and December 31, 2019, respectively, and represented 91% of total deposits at March 31, 2020, compared to 90% at December 31, 2019. At March 31, 2020, total deposits included $2.8 billion of brokered deposits, compared to $2.9 billion at December 31, 2019. At March 31, 2020 and December 31, 2019, brokered deposits primarily consist of brokered CDs. The weighted average contractual rate paid on brokered CDs was 1.73% and 1.89% at March 31, 2020 and December 31, 2019, respectively.

Our deposit base consists of: (1) Preferred Banking deposits, which are placed by clients who enter into deposit relationships directly with a relationship manager, business banker, preferred banker or wealth management professional; (2) deposits from Preferred Banking Offices, which are retail locations that gather deposits and service all of our clients; (3) wealth management sweep deposits, which primarily consist of deposits swept from clients' brokerage or other investment accounts; and (4) other deposits, which primarily consist of brokered deposits, municipal deposits, and other deposits that are not attributable to any specific deposit location.

The following table presents deposits by channel, and by region in which the accounts are domiciled:

($ in thousands)	March 31, 2020	December 31, 2019
Preferred Banking:		
Northern California	$ 24,493,448	$ 23,110,274
Metropolitan New York	14,406,615	14,432,673
Southern California	7,303,877	6,972,677
Boston	6,858,789	7,213,012
Subtotal	53,062,729	51,728,636
Preferred Banking Offices:		
Northern California	17,608,112	16,710,704
Metropolitan New York	5,679,048	5,179,643
Southern California	4,487,945	4,170,492
Boston	1,838,539	1,752,376
Subtotal	29,613,644	27,813,215
Wealth management sweep	7,771,631	5,579,478
Other	3,244,335	5,011,917
Total deposits	$ 93,692,339	$ 90,133,246

The following table presents business and consumer deposits:

($ in thousands)	March 31, 2020	December 31, 2019
Business deposits:		
Checking	$ 40,217,765	$ 36,383,549
Money market checking	6,413,149	7,930,337
Money market savings	2,668,058	4,585,428
CDs	2,011,936	2,014,152
	51,310,908	50,913,466
Consumer deposits:		
Checking	17,644,660	16,437,575
Money market checking	6,223,525	4,860,370
Money market savings and passbooks	6,384,632	6,000,927
CDs	12,128,614	11,920,908
	42,381,431	39,219,780
Total	$ 93,692,339	$ 90,133,246

We fund a portion of our assets with CDs that have balances greater than $250,000. At March 31, 2020 and December 31, 2019, our CDs having balances greater than $250,000 totaled $6.1 billion and $5.8 billion, respectively. The following table presents the maturities of our CDs greater than $250,000:

($ in thousands)	March 31, 2020
Remaining maturity:	
Three months or less	$ 1,218,964
Over three through six months	3,724,436
Over six through twelve months	794,205
Over twelve months	339,171
Total	$ 6,076,776
Percent of total deposits	6 %

At March 31, 2020 and December 31, 2019, the weighted average contractual rate paid on CDs was 1.77% and 1.94%, respectively, and the weighted average remaining maturity of CDs was 5.8 months and 5.4 months at the same respective period ends. The contractual maturities and weighted average contractual rate of our CDs were as follows:

	March 31, 2020	
($ in thousands)	**Amount**	**Rate**
Certificates of deposit maturing in:		
April 1 - December 31, 2020	$ 12,688,818	1.76 %
2021	928,188	1.65 %
2022	241,060	1.84 %
2023	96,317	2.33 %
2024	136,823	2.56 %
2025 and thereafter	49,344	2.30 %
Total	$ 14,140,550	1.77 %

Other Funding

Other sources of funding include federal funds purchased, short-term and long-term FHLB advances, and unsecured, term, senior notes and subordinated notes. Short-term borrowings, which include federal funds purchased and short-term FHLB advances, have an original maturity of one year or less. Long-term debt, which include long-term FHLB advances, senior notes and subordinated notes, have an original maturity in excess of one year.

As of March 31, 2020, we had no short-term borrowings.

FHLB Advances

FHLB advances may be either adjustable-rate in nature or fixed for a specific term. Our long-term, laddered maturity, fixed-rate FHLB advances as of March 31, 2020 were $16.3 billion. The weighted average remaining maturity of long-term FHLB advances was 1.7 years at March 31, 2020. The following table presents the contractual maturities and weighted average contractual rate of our long-term FHLB advances:

	March 31, 2020	
($ in thousands)	**Amount**	**Rate**
FHLB advances maturing in:		
April 1 - December 31, 2020	$ 2,350,000	2.46 %
2021	8,800,000	1.76 %
2022	2,900,000	1.55 %
2023	525,000	1.04 %
2024	1,275,000	1.26 %
2025 and thereafter	400,000	1.24 %
Total	$ 16,250,000	1.75 %

Senior Notes and Subordinated Notes

The following table presents the carrying values, coupon rates, optional redemption dates and maturity dates of the Bank's unsecured, term, fixed-rate senior notes, fixed-to-floating rate senior notes, and fixed-rate subordinated notes as of March 31, 2020. In February 2020, the Bank completed an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes due 2024.

	March 31, 2020				
($ in thousands)		Carrying Value [1]	Rate	Optional Redemption Date [2]	Maturity Date [3]
Senior notes:					
Fixed-rate, issued June 2017	$	497,947	2.500 %	May 6, 2022	June 6, 2022
Fixed-to-floating rate, issued February 2020	$	496,795	1.912% [4]	February 12, 2023	February 12, 2024
Subordinated notes:					
Fixed-rate, issued August 2016	$	388,098	4.375 %	February 1, 2046	August 1, 2046
Fixed-rate, issued February 2017	$	389,892	4.625 %	August 13, 2046	February 13, 2047

(1) Principal balance, net of unamortized issuance discounts and deferred issuance costs.
(2) The Bank has the option to redeem these notes prior to their maturity at the dates specified.
(3) Unless previously redeemed, the notes will mature at the dates specified.
(4) Interest is paid at a fixed rate of 1.912% per annum from February 12, 2020 through February 12, 2023, and is paid based on a floating rate of Compounded Secured Overnight Funding Rate ("SOFR") plus 0.620% beginning February 12, 2023.

Available Borrowing Capacity

Our unused, available borrowing capacity at the FHLB and the Federal Reserve discount window at March 31, 2020 was $21.1 billion and $4.6 billion, respectively. This available borrowing capacity is supported by pledged loans at the FHLB and investment securities at the Federal Reserve. See "Item 3. Quantitative and Qualitative Disclosures About Market Risk—Interest Rate Risk Management" for additional information regarding our funding practices.

Liquidity

Liquidity refers to our capacity to meet our cash and collateral obligations and to manage both expected and unexpected cash flows without adversely impacting the operations or financial health of the Bank. Sources of liquidity include both unencumbered assets, such as marketable loans and securities, and traditional forms of funding, such as deposits, borrowings and equity. At March 31, 2020, our investment securities portfolio of $18.8 billion and cash and cash equivalents of $3.9 billion collectively comprised 18% of total assets. At March 31, 2020, assets that are considered HQLA, including eligible cash, were $17.6 billion. HQLA include $7.4 billion of municipal securities. Effective in March 2020, the Federal Reserve eliminated the reserve requirement, which resulted in an increase in HQLA eligible cash as of March 31, 2020.

At March 31, 2020, we had $21.1 billion of unused, available borrowing capacity at the FHLB supported by pledged loans. In addition, we had $4.6 billion of unused, available borrowing capacity at the Federal Reserve discount window collateralized by pledged investment securities. This unused, available borrowing capacity at the FHLB and the Federal Reserve discount window equaled 21% of total assets.

We may also, from time to time, issue additional common stock, preferred stock, senior or subordinated notes or other forms of capital or debt instruments, depending on our capital, funding, asset-liability management or other needs as market conditions warrant and subject to any required regulatory approvals. Management believes that the sources of available liquidity are well-diversified and adequate to meet all reasonably foreseeable short-term and intermediate-term demands.

During the first quarter of 2020, our loan originations and purchases, net of repayments, were $5.5 billion. This activity was primarily funded by a net increase in deposits of $3.6 billion and a net increase in FHLB advances of $3.7 billion, offset by a net decrease in federal funds purchased of $450.0 million. During the first quarter of 2020, we sold 2,500,000 new shares of common stock in an underwritten public offering, which added $290.6 million to equity. In addition, we completed an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes, with net proceeds of $496.7 million.

At March 31, 2020, we had no short-term borrowings. We generally use these short-term borrowings to fund short-term assets, such as loans that have been committed for sale and floating rate investments, or to bridge temporary funding needs, such as those resulting from client investment activity or seasonal deposit fluctuations.

We primarily sell single family mortgage loans in the secondary market directly to a variety of investors. We originate single family mortgages in part to attract new clients for other banking and wealth management services. Selling mortgages allows us to originate more loans without growing our balance sheet loan portfolio and creating the need for additional funding and capital. All loans sold are performing loans and meet all underwriting standards required by us and the secondary market. We sold $495.3 million of loans during the first quarter of 2020.

Capital Resources

On March 27, 2020, the federal banking agencies issued the CECL Interim Final Rule. The CECL Interim Final Rule allows banks the option to elect to delay the estimated impact of CECL on its regulatory capital over a five-year transition period ending December 31, 2024. The Bank elected this transition relief during the first quarter of 2020, upon adoption of CECL.

The following table presents the Bank's components of regulatory capital, average assets, and risk-weighted assets:

($ in thousands)	March 31, 2020	December 31, 2019
Regulatory Capital Components [2]		
Shareholders' equity	$ 10,359,765	$ 9,851,107
CECL Interim Final Rule retained earnings adjustments [1]	20,219	—
CET1 capital adjustments and deductions:		
Preferred stock	(1,145,000)	(1,145,000)
Goodwill and other intangible assets, net of deferred taxes	(213,264)	(216,742)
Deferred tax assets that arise from net operating loss and tax credit carryforwards, net of deferred tax liabilities	(116,503)	(113,042)
Accumulated other comprehensive income	(17,312)	(5,131)
CET1 capital	8,887,905	8,371,192
Preferred stock	1,145,000	1,145,000
Additional Tier 1 capital	1,145,000	1,145,000
Tier 1 capital	10,032,905	9,516,192
Tier 2 capital instruments—subordinated notes [3]	777,990	777,885
Qualifying allowance for credit losses [4]	576,963	508,132
CECL Interim Final Rule allowance for credit losses adjustments [1]	(22,204)	—
Tier 2 capital	1,332,749	1,286,017
Total risk-based capital	$ 11,365,654	$ 10,802,209
Assets [2]		
Average assets	$ 118,606,623	$ 113,403,507
CECL Interim Final Rule average assets adjustments [1]	20,219	—
Average assets after adjustments	$ 118,626,842	$ 113,403,507
Risk-weighted assets	$ 90,074,385	$ 84,885,943
CECL Interim Final Rule deferred tax assets adjustments [1]	(1,985)	—
Risk-weighted assets after adjustments	$ 90,072,400	$ 84,885,943

[1] In accordance with the CECL Interim Final Rule, the Bank elected to delay the estimated impact of CECL on its regulatory capital and risk-weighted assets over a five-year transition period ending December 31, 2024. Amounts as of March 31, 2020 have been adjusted to exclude the following impacts attributed to the adoption of CECL: decreases in retained earnings, increases in allowance for credit losses on loans, held-to-maturity debt securities and unfunded loan commitments, decreases in average assets, and increases in risk-weighted assets.

[2] As defined by regulatory capital rules.

[3] Subordinated notes mature in 2046 and 2047.

[4] Includes the allowance for unfunded loan commitments.

At March 31, 2020 and December 31, 2019, the Bank's noncumulative perpetual preferred stock was 11% and 12% of Tier 1 capital, respectively.

During the first quarter of 2020, the Bank sold 2,500,000 new shares of common stock in an underwriting public offering, which added approximately $290.6 million to common equity.

A "capital conservation buffer" of 2.5% of risk-weighted assets is also required under the Basel III Capital Rules. The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a CET1 capital ratio above the minimum requirement but below the capital conservation buffer will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall and "eligible retained income" (that is, the greater of net income for the four calendar quarters preceding the current calendar quarter, net of any distributions and associated tax effects not already reflected in net income, and the average of net income over the preceding four quarters).

Our capital ratios exceeded all applicable regulatory requirements at March 31, 2020 for well-capitalized institutions, and our capital conservation buffer exceeded the minimum requirement of 2.5%. The following table presents our capital ratios and regulatory requirements:

			Regulatory Requirements		
Capital Ratios	**March 31, 2020** [(1)]	**December 31, 2019**	**Well-Capitalized Ratio**	**Minimum Capital Ratio**	**Minimum Capital Conservation Buffer** [(2)]
Tier 1 leverage ratio (Tier 1 capital to average assets)	8.46 %	8.39 %	5.00 %	4.00 %	— %
CET1 capital to risk-weighted assets	9.87 %	9.86 %	6.50 %	4.50 %	2.50 %
Tier 1 capital to risk-weighted assets	11.14 %	11.21 %	8.00 %	6.00 %	2.50 %
Total capital to risk-weighted assets	12.62 %	12.73 %	10.00 %	8.00 %	2.50 %

(1) As of March 31, 2020, the Bank's election of regulatory capital relief under the CECL Interim Final Rule resulted in a 2 basis point increase in the Tier 1 leverage ratio, CET1 capital ratio and Tier 1 capital ratio, and no impact on the total capital ratio.

(2) As of March 31, 2020, our capital conservation buffer was 4.62%, which exceeded the minimum requirement of 2.5% required to be held by banking institutions.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk Management

We seek to measure and manage the potential impact of changes in interest rates on our net interest income and net interest margin, known as interest rate risk. Interest rate risk primarily occurs when interest-earning assets and interest-bearing liabilities mature or reprice at different times, on a different basis or in unequal amounts. The Bank's Board of Directors approves policies and limits governing the management of interest rate risk at least annually. Our Asset Liability Management ("ALM") and Investment Committees further establish risk management guidelines and procedures within the broader policies and limits established by the Bank's Board of Directors. Compliance with these policies and limits is reported to the Bank's Board of Directors on an ongoing basis and decisions on the management of interest rate risk are made as needed. We utilize a variety of interest rate risk management tools to evaluate our interest rate risk.

We manage interest rate risk primarily by originating and retaining adjustable-rate loans and hybrid ARM loans with initial short- or intermediate-term fixed rates and funding these assets with checking and savings accounts, short- and intermediate-term CDs, laddered maturity fixed-rate FHLB advances and unsecured, term, fixed-rate senior notes, fixed-to-floating rate senior notes and fixed-rate subordinated notes. We may also utilize overnight and short-term borrowings to fund certain short-term assets, such as loans that have been committed for sale and floating rate investments, or to bridge temporary funding needs, such as those resulting from client investment activity or seasonal deposit fluctuations. As an active and ongoing part of our ALM strategy, we may sell long-term fixed-rate single family mortgage loans into the secondary market through ongoing, or "flow," transactions. We may also sell portions of our single family hybrid ARM and fixed-rate loans in bulk loan transactions or securitizations. We sold $495.3 million of loans in the first quarter of 2020.

In addition to the mix and pricing of interest-earning assets and interest-bearing liabilities, our net interest income and net interest margin may also be affected by factors such as changes in federal, state or local regulations, competition, market conditions, levels of loan sales and repayment rates, levels of cash held on the balance sheet, overall growth of assets and liabilities, general interest rate trends, including movements in interest rates and the shape of the yield curve, basis risk, level and cost of FHLB advances, market rates of new capital or debt offerings and any nonaccrual loans. Our net interest margin may also be affected by our overall business model or strategy. See "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Business and Financial Statements—Interest Rates" for discussion of FOMC's actions in response to COVID-19.

There is also interest rate risk inherent in the estimated fair value of our MSRs. Movements in interest rates affect the servicing fees from MSRs, which are recorded in noninterest income as opposed to net interest income. In a decreasing interest rate environment, loans in the servicing portfolio may repay more rapidly, which reduces current and future servicing income. Inversely, in an increasing interest rate environment, repayments may decrease, which increases expected future servicing income.

Balance Sheet Overview

Our net interest income and net interest margin may be affected by the mix of interest-earning assets and interest-bearing liabilities. The Bank has earning assets with reset periods or maturity of less than one year totaling $33.4 billion, or 28% of total earning assets at March 31, 2020. Of these earning assets, the Bank has loans, including loans held for sale, which are currently adjustable and reprice with indices or mature within one year totaling $28.8 billion, or 30% of the total loan portfolio at March 31, 2020. The loan portfolio that reprices at least quarterly to market rate indices, such as Prime or LIBOR, totaled $19.1 billion, or 20% of the total loan portfolio at March 31, 2020. The loan portfolio with lagging indices, such as COFI and the CMT, totaled $6.1 billion, or 6% of the total loan portfolio at March 31, 2020. Additionally, the loan portfolio that either (1) matures within one year; (2) is within one year of adjusting from the initial fixed-rate period; or (3) is committed for sale totaled $3.6 billion, or 4% of the total loan portfolio at March 31, 2020. In addition, at March 31, 2020, the Bank held $3.5 billion in

cash and $1.2 billion in investment securities (collectively, 20% of total cash and investment securities), that reprice to market rates at least quarterly or are callable in less than one year.

Total checking deposits were $57.9 billion, or 62% of total deposits at March 31, 2020. Total checking deposits include both noninterest-bearing checking accounts and interest-bearing checking accounts, which currently pay a nominal rate of 2 basis points, but exclude money market checking accounts. We do not expect the rate paid on interest-bearing checking deposits to fluctuate much with changes in overall interest rates, consistent with our history. The rates paid on money market savings, money market checking and passbook deposit accounts generally move directionally with changes in short-term prevailing interest rates and may be subject to competitive pricing pressure. Money market savings, money market checking and passbook deposit accounts together totaled $21.7 billion, or 23% of total deposits at March 31, 2020. CDs were $14.1 billion, or 15% of total deposits and had a weighted average remaining maturity of 5.8 months at March 31, 2020.

We utilize long-term FHLB advances as a source of fixed-rate, term funding to help manage our overall interest rate risk. Such advances totaled $16.3 billion at March 31, 2020 and had a weighted average remaining maturity of 1.7 years. In addition, the Bank has also issued unsecured, term, fixed-rate senior notes, unsecured, term, fixed-to-floating rate senior notes and unsecured, term, fixed-rate subordinated notes. At March 31, 2020, the senior notes had a carrying value of $994.7 million and mature in June 2022 and February 2024. Also, at March 31, 2020, the subordinated notes had a carrying value of $778.0 million and mature in August 2046 and February 2047.

Net Interest Income Simulation

In addition to evaluating our current balance sheet, we also perform more simulations to measure and evaluate our potential net interest income exposure to changes in interest rates. Based on the results of such analyses, we may make changes to our asset/liability mix, to draw down short or long-term advances with the FHLB, to issue long-term senior notes or long-term subordinated notes, to sell or securitize loans, to enter into interest rate exchange agreements or to otherwise seek to better protect ourselves against potential adverse effects from changes in interest rates.

We use a simulation model to measure and evaluate our net interest income risk exposure. We run various hypothetical interest rate scenarios at least quarterly and compare these results against a scenario with no changes in interest rates. Our net interest income simulation model incorporates various assumptions, which management believes to be reasonable but which may have a significant impact on results, such as: (1) the timing and magnitude of changes in interest rates, (2) the yield curve evolution and shape, (3) repricing and maturing characteristics, other than contractual, for market rate sensitive instruments, (4) non-interest bearing checking deposit balance behavior and the possibility of shifts in preference between interest-bearing and non-interest bearing products, (5) varying sensitivities of financial instruments due to differing underlying rate indices, (6) loan prepayment speeds for different interest rate scenarios, (7) the effect of interest rate floors, periodic loan caps and lifetime loan caps, (8) the levels of cash held on our balance sheet and (9) overall growth, product mix and repayment rates of assets and liabilities. Because of limitations inherent in any approach used to measure interest rate risk, simulation results are not intended as a precise forecast of the actual effect of a change in market interest rates on our results, but rather as a means to better understand the direction, timing and magnitude of interest rate risk exposure and plan and execute the appropriate ALM strategies.

Potential changes to our net interest income in hypothetical rising and declining rate scenarios, measured over a two-year period beginning March 31, 2020, are presented in the following table. The projections assume both (a) instantaneous parallel shifts upward of 100 and 200 basis points and instantaneous parallel shifts downward of the yield curve of 100 basis points occurring immediately ("Shock") and (b) gradual parallel shifts upward and downward of the yield curve in even increments over the first twelve months, followed by rates being held constant thereafter ("Ramp"). In downward shifts of the yield curve, interest rates are not modeled to decline lower than 0%.

	Estimated Increase (Decrease) in Net Interest Income	
Change in Market Interest Rates	Twelve Months Ending March 31, 2021	Twelve Months Ending March 31, 2022
Shock:		
+200 basis points immediately	1.8 %	8.2 %
+100 basis points immediately	1.1 %	5.5 %
-100 basis points immediately	(0.3)%	(2.7)%
Ramp:		
+200 basis points over next 12 months	0.5 %	3.4 %
+100 basis points over next 12 months	0.4 %	2.6 %
-100 basis points over next 12 months	(0.4)%	(2.4)%

As of March 31, 2020, the Bank's net interest income position is mildly asset sensitive, indicating that we would generally benefit from parallel increases in interest rates. In a hypothetical rising rate environment, we benefit from adjustable-rate loans, which would begin to reprice upward with prevailing rates, adjustable-rate securities, certain fixed funding sources and modeled deposit balances and mix.

With respect to deposit balances, we expect non-interest bearing and interest-bearing checking balances, which exclude money market checking, to migrate from the current level of 62% of total deposits to approximately 60% of total deposits over the two-year horizon, depicting a shift in preference by some account holders towards higher yielding deposit products.

Excluding certificates of deposit, the remaining deposits include money market checking, money market savings and passbook accounts and are assumed to reprice with a modest lag by approximately 70% of short-term interest rate increases or 66% of short-term rate decreases over the two-year period, which is also consistent with our historical experience.

The results of this earnings simulation analysis are hypothetical, and a variety of factors might cause actual results to differ substantially from what is depicted. For example, if the timing and magnitude of interest rate changes differ from our projections or theoretical scenarios, our net interest income might vary significantly. Non-parallel yield curve shifts, such as a steepening, flattening, or inversion of the yield curve or changes in interest rate spreads, would also cause our net interest income to be different from that depicted. Actual results could also differ from those projected if we grow assets and liabilities faster or slower than estimated, if we experience a net outflow of deposit liabilities, if the size, frequency, or timing of actual cash flows differ from contractual cash flows, or if our mix of assets and liabilities otherwise changes materially. Actual results could also differ from those projected if we experience repayment speeds in our loan portfolio substantially different from those assumed in the simulation model.

Finally, these simulation results do not contemplate all the actions that we may undertake in response to potential or actual changes in interest rates, such as changes to our loan, investment, deposit, funding, or hedging strategies.

Although we believe we are effectively managing our current exposure to changes in interest rates, we may decide to take further action depending on subsequent interest rate and economic developments, the growth rates and mix of loans and deposits, the future level of loan repayments, purchases of investment securities, and changes in other assets.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As required by Securities and Exchange Commission rules, we carried out an evaluation of the effectiveness of the design and operation of our “disclosure controls and procedures,” as such term is defined in Rule 13a-15(e) under the Exchange Act as of the end of the period covered by this report. Our management, including our chief executive officer and chief financial officer, supervised and participated in the evaluation. Based on that evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures, as of March 31, 2020, were effective for providing reasonable assurance that information required to be disclosed by us in reports filed or submitted under the Exchange Act was accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There was no significant change in our internal control over financial reporting during the quarter ended March 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

There are no material pending legal proceedings to which we or any of our subsidiaries is a party or to which any of our property is subject. We are subject to ordinary routine litigation incidental to our business but we believe the results of such matters will not have a material effect on our business or financial condition.

Item 1A. Risk Factors.

There are risks, many beyond our control, which could cause our results to differ significantly from management’s expectations. For a description of these risks, please see the risk factors previously described in Part I, “Item 1A. Risk Factors” in our 2019 Form 10-K. In addition, the following represents a material change in our risk factors from those disclosed in our 2019 Form 10-K.

The COVID-19 pandemic has caused substantial disruptions to the domestic and global economy, and the communities we serve, which may have an adverse effect on our business, financial position and results of operations.

COVID-19 has created economic and financial disruptions globally and has led governmental authorities to take unprecedented measures to mitigate the spread of the disease, including travel restrictions, business closures and shelter-in-place orders, and to take actions designed to stabilize markets and promote economic growth, including meaningfully influencing the interest-rate environment.

The disruptions caused by COVID-19 may cause national, regional and local economies to suffer lasting disruptions, which could result in decreased consumer spending and demand for lending, which may materially impact our business. Volatile market conditions and changed consumer behavior may have a material impact on our lending business, and in particular our real estate lending business, including through reduced demand for residential, commercial and multifamily real estate or decreasing property values. Also, declines in the financial markets may negatively affect our wealth management business and the level of assets under management or administration. Declining market conditions may reduce our wealth management fees and subject us to greater litigation risk. Additionally, low interest rates, including the possibility for negative interest rates, may adversely impact our interest income and decrease the value of our assets.

These disruptions may also impair our clients' ability to repay loans. Further, clients may seek additional loans that they may be unable to repay, particularly as businesses remain closed and unemployment levels rise. These circumstances could result in future delinquencies and increases in our provision for credit losses and provision for unfunded loan commitments. Additionally, the macroeconomic forecasts used in determining the allowance for credit losses could change, resulting in significant changes in the allowance for credit losses. Declines in market conditions may increase the risk of default and decrease the value of collateral. Further, our ability to seek repayment for loans may be limited by government restrictions, such as government-mandated suspensions on evictions, foreclosures and mortgage payments, including as a result of the CARES Act.

From an operational perspective, COVID-19 has resulted in, and could continue to result in, temporary closures of certain of our offices and the facilities of many of our clients and service providers. In response to the pandemic, we have implemented contingency plans, which include company-wide remote working arrangements, modified hours in our preferred banking offices and social distancing. However, an extended period of remote working arrangements could increase operational risks resulting from increased dependencies on the ability of our employees to work remotely, which in turn may be impacted by various unrelated events such as power outages or damaged infrastructure that may occur due to wildfires or other natural disasters. Additionally, although we maintain business continuity plans, COVID-19 may impair the availability of key employees who are necessary to conduct our business. We also outsource certain critical business functions to third party vendors and service providers, which may be unable to perform or experience operational failures as a result of COVID-19.

Further, actions taken by U.S. or other governmental authorities that are intended to mitigate the effects of COVID-19, or delays in the implementation of regulatory measures that had been pending prior to COVID-19, may result in regulatory uncertainty and impose additional restrictions. At this time, we cannot predict how legal and regulatory responses to concerns about COVID-19 may impact our business.

The extent of the impact of COVID-19 on our business, financial position and results of operations will depend largely on future developments, which are highly uncertain and cannot be predicted. At this time, we are not able to estimate the effect of COVID-19 on our business, financial position and results of operations.

In addition, the risks presented in our 2019 Form 10-K may be heightened by COVID-19 and could materially and adversely affect our business, financial position and results of operations. Any of the risks described in our 2019 Form 10-K or in this Quarterly Report on Form 10-Q could, by itself or together with one or more other factors, materially and adversely affect our business, results of operations or financial condition. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially and adversely affect our business, results of operations or financial condition.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Recent Sales of Unregistered Securities

During the first quarter of 2020, we sold 82,184 shares of common stock to eligible employees under our Employee Stock Purchase Plan for aggregate cash consideration of $6.9 million. These sales were exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Section (3)(a)(2) thereof because the sales involved securities issued by a bank.

During the first quarter of 2020, we granted 141,092 restricted stock units, net of forfeitures, that are time vesting. In addition, we granted 31,966 restricted stock units, net of forfeitures, that vest over time, provided certain performance criteria are achieved. These awards were granted to certain employees and officers and had an aggregate grant date fair value of $19.2 million. We did not receive any cash consideration in connection with these grants. These grants were exempt from registration under the Securities Act, pursuant to Section (3)(a)(2) thereof because the grants involved securities issued by a bank.

During the first quarter, we sold 2,500,000 shares of common stock as part of an underwritten public offering. The aggregate public offering price was $295.0 million, and the aggregate underwriting discount was $4.1 million. Net proceeds, after underwriting discounts, were $290.9 million ($116.36 per share), which we used for general corporate purposes. The underwriters in the transaction were BofA Securities, Inc., J.P. Morgan Securities LLC, Goldman Sachs & Co. LLC, Morgan Stanley & Co. LLC and Keefe, Bruyette & Woods, Inc. This transaction was exempt from registration under the Securities Act, pursuant to Section (3)(a)(2) thereof because the transaction involved securities issued by a bank.

During the first quarter, we sold $500.0 million in aggregate principal amount of 1.912% senior fixed-to-floating rate notes due 2024 as part of an underwritten public offering. The aggregate public offering price was $500.0 million, and the aggregate underwriting discount was $2.3 million. Net proceeds, after underwriting discounts, were $497.8 million, which we used for general corporate purposes. The principal underwriters in the transaction were BofA Securities, Inc., Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC. This transaction was exempt from registration under the Securities Act pursuant to Section 3(a)(2) thereof because the transaction involved securities issued by a bank.

Purchases of Equity Securities By the Issuer and Affiliated Purchasers

We did not repurchase any of our common stock during the first quarter of 2020 or at any time since our inception on July 1, 2010.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

An Index to Exhibits listing the exhibits filed or furnished with this report is presented prior to the signature page to this Quarterly Report on Form 10-Q and is incorporated herein by reference.

INDEX TO EXHIBITS

Exhibit No.	Description
4.1	Fiscal and Paying Agency Agreement, dated February 12, 2020, between the Bank and The Bank of New York Mellon Trust Company, N.A., incorporated by reference to Exhibit 4.1 of Form 8-K filed on February 14, 2020.
10.1	Form of Restricted Stock Unit Agreement—Time Vesting under the 2017 Omnibus Award Plan. [1], [2]
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. [2]
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. [2]
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. [2]
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. [2]

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(1) This exhibit is a management contract or a compensatory plan or arrangement.

(2) Filed herewith.

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.

FIRST REPUBLIC BANK

May 8, 2020	/s/ Michael J. Roffler
	Michael J. Roffler Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 10.1

FIRST REPUBLIC BANK
2017 OMNIBUS AWARD PLAN

RESTRICTED STOCK UNIT AGREEMENT

THIS RESTRICTED STOCK UNIT AGREEMENT (this "Agreement"), dated as of _______________ (the "Date of Grant"), is made by and between **First Republic Bank**, a California state-chartered bank ("Bank") and __________________________ ("Participant").

WHEREAS, Bank adopted the **First Republic Bank** 2017 Omnibus Award Plan (the "Plan"), pursuant to which restricted stock unit awards may be granted with respect to Common Stock of Bank;

WHEREAS, Bank desires to grant Participant a restricted stock unit award with respect to the number of shares of Common Stock provided for herein; and

WHEREAS, Bank's grant of restricted stock units is conditioned on Participant's agreeing to the Restrictive Covenants attached as Appendix A (which are an integral part of this Agreement) (the "Restrictive Covenants") and the other terms of this Agreement.

NOW, THEREFORE, in consideration of the recitals and the mutual agreements herein contained, the parties hereto agree as follows:

1. Grant of Restricted Stock Units.

(a) Subject to the terms and conditions of this Agreement and the Plan, Bank hereby grants to Participant ____________ restricted stock units ("RSUs"). Upon the expiration of the applicable Restricted Period with respect to each outstanding RSU, Bank shall deliver to Participant, or his or her beneficiary, without charge, one share of Common Stock of Bank (each, a "Share") in accordance with the terms and conditions hereof.

(b) Incorporation by Reference, Etc. The provisions of the Plan are hereby incorporated herein by reference. Except as otherwise expressly set forth herein, this Agreement shall be construed in accordance with the provisions of the Plan and any capitalized terms not otherwise defined in this Agreement shall have the meaning set forth in the Plan. In the event of conflict between the terms herein and the terms of the Plan, the terms of the Plan will govern the RSUs.

(c) Compliance with Employment Policies and Restrictive Covenants. Notwithstanding anything to the contrary contained herein, Participant agrees that his or her entitlement to retain any RSUs and to receive Shares (including any cash or other securities or property payable in lieu thereof and any dividend equivalents in respect thereof) upon settlement of the RSUs shall be conditioned on Participant's compliance with the covenants and other obligations set forth in the Restrictive Covenants and otherwise in the employment policies of Bank, as such covenants, obligations and policies may be revised from time to time by Bank (collectively, the "Employment Policies"), and Participant further agrees that the

Committee may in its sole discretion cancel any RSU, in whole or in part, if Participant, without the consent of Bank, shall fail to comply with any of the Employment Policies, or otherwise engages in activity that is in conflict with or adverse to the interest of Bank or any Affiliate, including fraud or conduct contributing to any financial restatements or irregularities, as determined by the Committee in its sole discretion. Participant agrees that Bank may condition the settlement of the RSUs upon Participant's written certification of his or her compliance with any of the Employment Policies and the other provisions of this Section 1(c).

2. Terms and Conditions.

(a) Restricted Period. The period of time between the Date of Grant and the vesting of RSUs (and the termination of restrictions thereon) will be referred to herein as the "Restricted Period." Except as may otherwise be provided herein, one third (1/3) of the RSUs shall become vested on each twelve-month anniversary of the Date of Grant, subject to Participant's continuous service as an employee or, if determined by the Committee or as appropriate the CEO, CFO or Chief People Officer, a consultant ("Continuous Service") with Bank or its Affiliates through each such vesting date. Except as may otherwise be provided herein, if Participant's Continuous Service with Bank is terminated at any time for any reason prior to the lapse of the Restricted Period, all RSUs granted hereunder that have not vested on or prior to such termination of Continuous Service shall be forfeited by Participant.

(b) Impact of a Change In Control on RSUs.

(i) Substitution or Assumption by Successor. Upon a Change in Control, as defined in the Plan, in which this Award is assumed or substituted with an equivalent value award, the Award (including any substitute or replacement award) will vest on the vesting dates described in Section 2(a) in accordance with this Section 2 subject only to Continuous Service through each such date (except as otherwise set forth in this Section 2).

(ii) No Substitution or Assumption by Successor. Subject to Participant's Continuous Service through the date thereof, and notwithstanding Section 2(a) above, the vesting of the RSUs shall be accelerated upon any Change in Control, as defined in the Plan in which the RSUs are not substituted, assumed, replaced or continued by a successor pursuant to the terms of the Plan.

(c) Treatment of RSUs Upon Termination of Continuous Service.

(i) General. Except as provided in Section 2(b)(ii) above or Section 2(c)(ii) below, if Participant's Continuous Service terminates prior to the last day of the Restricted Period applicable to any outstanding RSUs for any reason (other than by reason of death or Disability as set forth below), then Participant shall forfeit all outstanding, unvested RSUs, which shall terminate and expire on the date of such termination of Continuous Service without consideration to Participant and without any action by Bank or any Affiliate. Neither Participant nor any successors, heirs, assigns, or legal representatives of Participant shall thereafter have any rights or interest in such RSUs or consideration therefor.

(ii) Involuntary Termination following Change in Control. If Participant's Continuous Service is terminated during the Restricted Period within 24 months

following a Change in Control as a result of termination by Bank without Cause, as defined in the Plan, or Participant's resignation for Good Reason, as defined below, the vesting of all of the outstanding RSUs will accelerate in full upon such termination.

For purposes of this Agreement, "Good Reason" means the occurrence of any of the following, without Participant's express written consent:

(1) A material reduction in Participant's authority, duties or responsibilities;

(2) A material reduction in Participant's base compensation; or

(3) A material change in the geographic location at which Participant must perform his services; provided that in no instance will the relocation of Participant to a facility or a location of thirty-five (35) miles or less from Participant's then current office location be deemed material for purposes of this Agreement;

provided, however, that a termination of Continuous Service shall not be considered for "Good Reason" unless Participant provides written notice of the initial occurrence of one of the foregoing events to Bank within ninety (90) days thereafter, and provides Bank thirty (30) days to cure, and then terminates employment within one hundred eighty (180) days following such initial occurrence.

(d) Retirement or Disability. Notwithstanding Section 2(c)(i) above, if Participant's Continuous Service terminates during the Restricted Period as a result of Participant's Retirement, or because Participant becomes disabled within the meaning of that term under Section 409A(a)(2)(C) of the Code ("Disability"), RSUs will continue to be eligible to vest during the Restricted Period in accordance with the schedule set forth in Section 2(a), but without regard to Participant's Continuous Service as set forth in Section 2(a). For purposes of this Agreement, "Retirement" means voluntary termination of Continuous Service by Participant that occurs on or after a mutual agreement is reached with the Committee.

(e) Death. Notwithstanding Section 2(c)(i) above, if Participant's Continuous Service terminates during the Restricted Period as a result of Participant's death, Participant will fully vest in the Award on the date of death.

(f) Settlement of RSUs. As soon as practicable after vesting, each outstanding RSU will be settled through the delivery by Bank of one share of Bank Common Stock and any dividend equivalents credited with respect to such RSU. Notwithstanding any contrary provision of this Agreement, pursuant to Section 8(d)(ii) of the Plan, the Committee may, in its sole discretion, elect to pay cash or part cash and part Shares in lieu of delivering only Shares in respect of any vested RSUs.

(g) Dividend Equivalents. If a cash dividend is paid with respect to the Shares, a cash dividend equivalent equal to the total cash dividend Participant would have received had his or her outstanding RSUs been actual Shares will be accumulated and paid in cash to Participant through payroll if and when such RSUs become vested and settled. Neither Participant nor any successors, heirs, assigns, or legal representatives of Participant shall have any rights or interest in dividend equivalent amounts in respect of any RSUs which are forfeited.

(h) Transferability. Unless otherwise permitted by the Committee pursuant to Section 13(c) of the Plan, the RSUs may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by Participant other than by will or by the laws of descent and distribution, and any such purported assignment, alienation, pledge, attachment, sale, transfer or encumbrance shall be void and unenforceable against Bank; provided, that the designation of a beneficiary shall not constitute an assignment, alienation, pledge, attachment, sale, transfer or encumbrance.

(i) Rights as Shareholder. Participant shall not be deemed for any purpose to be the owner of any of the Shares underlying the RSUs unless, until and to the extent that (i) the RSU shall have become vested pursuant to its terms and (ii) Bank shall have issued and delivered to Participant the Shares underlying such RSUs.

(j) Withholding Taxes. To the extent that the vesting of the RSUs or the receipt of Shares (including any cash or other securities or property payable in lieu thereof), or the vesting or receipt of dividend equivalents, results in income to Participant for federal or state tax purposes, Participant shall make adequate arrangements satisfactory to Bank, at its discretion, to meet Bank's obligations under applicable tax withholding laws or regulations. Unless Bank shall otherwise provide, Bank shall withhold Shares that would otherwise be issued upon vesting of the RSUs to cover applicable withholding taxes, equal to the greatest number of whole shares having a Fair Market Value on the date immediately preceding the date on which the applicable tax liability is determined not in excess of the minimum amount required to satisfy the statutory withholding tax obligations with respect to the RSUs. Alternatively, Bank, in its sole discretion, may provide for the withholding of applicable taxes from the proceeds of the sale of Shares acquired upon vesting of the RSUs, either through a voluntary sale or through a mandatory sale arranged by Bank (on Participant's behalf pursuant to this authorization). Bank may also require Participant to deliver to Bank at the time of vesting of the RSUs or receipt of Shares, or the vesting or receipt of other amounts, as the case may be, such amount of money as Bank may require to satisfy all tax withholding obligations of Bank, and Participant also authorizes Bank to satisfy all such tax withholding obligations from his or her wages or other cash compensation payable to Participant by Bank. Bank may refuse to issue or deliver the Shares or other amounts unless all withholding taxes that may be due as a result of this award have been paid.

3. Miscellaneous.

(a) Notices. All notices, demands or other communications provided for or permitted hereunder shall be made in writing and shall be by registered or certified first class mail, return receipt requested, telecopier, courier service, overnight mail or personal delivery:

(i) if to Bank:

First Republic Bank
111 Pine Street
San Francisco, CA 94111
Attention: Michael Roffler
Facsimile No.: (415) 262-4131

(ii) if to Participant, at Participant's last known address on file with Bank.

(b) No Right to Continued Employment or Service. Nothing in the Plan or in this Agreement shall confer upon Participant any right to continue in the service of Bank or its Affiliates or shall interfere with or restrict in any way the right of Bank or its Affiliates, which are hereby expressly reserved, to remove, terminate or discharge Participant at any time for any reason whatsoever.

(c) Bound by Plan. By signing this Agreement, Participant acknowledges that he has received a copy of the Plan and has had an opportunity to review the Plan and agrees to be bound by all the terms and provisions of the Plan (other than those terms expressly excluded from application in this Agreement).

(d) Successors. The terms of this Agreement shall be binding upon and inure to the benefit of Bank, its successors and assigns, and of Participant and the beneficiaries, executors, administrators, heirs and successors of Participant.

(e) Modifications. No change, modification or waiver of any provision of this Agreement shall be valid unless the same is in writing and signed by the parties hereto.

(f) Code Section 409A. To the fullest extent applicable, this Agreement and the benefits payable hereunder are intended to be exempt from the definition of "nonqualified deferred compensation" under Section 409A of the Code in accordance with the "short-term deferral" exception available under the regulations promulgated under Section 409A. In that regard, Shares (including any cash or securities or other property payable in lieu thereof) and any dividend equivalents shall be issued to Participant no later than March 15 following the calendar year in which Participant's right to receive such Shares or other amounts pursuant to this Agreement is no longer subject to a substantial risk of forfeiture within the meaning of Section 409A and the regulations thereunder. To the extent that any such benefit is or becomes subject to Section 409A due to a failure to qualify for an exemption from the definition of nonqualified deferred compensation in accordance with such regulations, this Agreement is intended to comply with the applicable requirements of Section 409A with respect to such benefits. This Agreement shall be interpreted and administered to the extent possible in a manner consistent with the foregoing statement of intent, and any ambiguity as to its compliance with Section 409A will be read in such a manner so that all payments hereunder comply with Section 409A of the Code. If the Committee determines that any Shares issued or amounts payable hereunder will be taxable to Participant under Section 409A of the Code and related Department of Treasury guidance, prior to delivery to such Participant of such Shares or payment to such Participant of such amount, Bank may (a) adopt such amendments to this

Agreement and the Plan, and appropriate policies and procedures, including amendments and policies with retroactive effect, that the Committee determines necessary or appropriate to preserve the intended tax treatment of the RSUs granted hereunder and/or (b) take such other actions as the Committee determines necessary or appropriate to avoid or limit the imposition of an additional tax under Section 409A of the Code. Further, each installment of a series of payments hereunder will be deemed to be a separate payment for purposes of Section 409A of the Code. Finally, solely to the extent required by Section 409A of the Code, and notwithstanding any other provision of the Plan or this Agreement, any payments made hereunder on account of the "separation from service" (within the meaning of Section 409A(a)(2)(A)(i) of the Code) of a Participant who is determined to be a "specified employee" (within the meaning of Section 409A(a)(2)(B)(i) of the Code) shall not actually be paid before the date which is six months after Participant's separation from service (or, if earlier, the date of death of Participant) or a "change in control event" (within the meaning of Section 409A of the Code).

(g) Severability. If any provision of this Agreement (including Appendix A) or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of this Agreement which can be given effect without the invalid provisions or applications and to this end the provisions of this Agreement are declared to be severable. If any term or provision of this Agreement is invalid, illegal or incapable of being enforced by any applicable law or public policy, all other conditions and provisions of this Agreement shall nonetheless remain in full force and effect so long as the economic and legal substance of the transactions contemplated by this Agreement is not affected in any manner materially adverse to any party.

(h) Entire Agreement. This Agreement and the Plan, including all appendices and exhibits thereto, contain the entire agreement and understanding of the parties hereto with respect to the subject matter contained herein and therein and supersede all prior communications, representations and negotiations in respect thereto.

(i) Venue and Governing Law. The parties agree that the exclusive jurisdiction and venue for any action or proceeding arising under or related to this Agreement shall be the state or federal courts located in the State of the Bank office to which Participant is assigned as of (i) the Date of Grant, or (ii) in the event Participant previously received a grant of RSUs, the date on which Participant received the first grant of RSUs (the "Forum State"). This Agreement and the rights and obligations of Participant hereunder shall be construed and determined in accordance with the laws of the Forum State, without regard to the Forum State's internal conflict of laws principles.

(j) Headings. The headings of the Sections hereof are provided for convenience only and are not to serve as a basis for interpretation or construction, and shall not constitute a part, of this Agreement.

(k) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, this Agreement (which includes all of the terms of Appendix A) has been executed and delivered by the parties hereto on the first date set forth above. For the avoidance of doubt, Appendix A contains restrictive covenants that limit the ability of Participant to engage in certain practices following employment with Bank and is an integral part of this Agreement, without which Bank would not have granted the opportunity to earn the RSUs.

First Republic Bank

By:

/s/ Michael J. Roffler

APPENDIX A

RESTRICTIVE COVENANTS

The Restrictive Covenants set forth in this Appendix A to the Restricted Stock Unit Agreement (the "Agreement") limit the ability of Participant to engage in certain practices following employment with Bank and is an integral part of the Agreement, without which Bank would not have granted the opportunity to earn the RSUs.

1. Non-Competition; Garden Leave.

(a) Non-Competition. You agree that while you are employed by Bank or its Affiliates, you shall not, directly or indirectly (without the prior written consent of Bank), (i) participate in or associate with (including as a director, officer, employee, partner, consultant, agent or advisor) a Competitive Business, nor (ii) hold a 5% or greater equity (including stock options, whether or not exercisable), voting or profit participation interest in a Competitive Business.

(b) Garden Leave. You agree that, upon the termination of your employment (i) by Bank or its Affiliates other than without Cause (as defined in the Plan) or (ii) by you for any reason, you shall, upon request by Bank or such Affiliate, and its undertaking to pay you an amount equal to your then base monthly salary (subject to any applicable withholdings) during such period, maintain yourself available to consult with Bank or such Affiliate for up to 90 days following such termination (the "[Garden Leave][Consulting] Period") for the purpose of assuring an orderly transition of your duties and responsibilities to another employee of Bank and, during such period, you shall not engage in any Competitive Business. For the avoidance of doubt, during the [Garden Leave][Consulting] Period you shall not be eligible to receive any bonus payments, awards or other incentive compensation, unless provided otherwise pursuant to the terms of any applicable award agreements, the [Garden Leave][Consulting] Period not being part of your Continuous Service for purposes of the Agreement or concepts similar to continuous service under any other applicable award agreements.

2. Non-Solicitation. You agree that (a) during your employment and for a period ending on the first anniversary following termination of your employment (i) by Bank or its Affiliates other than without Cause (as defined in the Plan) or (ii) by you for any reason, you shall not take any action, directly or indirectly (without the prior written consent of Bank), that causes or could reasonably be expected to cause any person who is then an employee of Bank or its Affiliates to resign from Bank or its Affiliates or to apply for or accept employment with any other business or enterprise or (b) during your employment [and for a period ending on the first anniversary following termination of your employment (i) by Bank or its Affiliates other than without Cause (as defined in the Plan) or (ii) by you for any reason], except to the extent otherwise agreed in writing by Bank, you shall not take any action, directly or indirectly (without the prior written consent of Bank), that causes or could reasonably be expected to cause any customer or prospective customer of Bank or its Affiliates, to whom you provided services or with whom you otherwise had contact to (i) become a customer of or transact any business with

a Competitive Business, or (ii) reduce or refrain from doing any business with Bank or its Affiliates.

3. Non-Disparagement and Non-Disclosure. You agree that, while you are employed by Bank or its Affiliates [and thereafter], you will not, in any manner, directly or indirectly [(a)] disparage, portray in a negative light, or make any statement which would be harmful to, or lead to unfavorable publicity for, Bank or its Affiliates or any of its or their current or former directors, officers or associates, including without limitation, in any and all interviews, oral statements, written materials, electronically-displayed materials and materials or information displayed on internet- or internet-related sites [or (b) disclose the circumstances of your termination to any other party], except that you may make such disclosure on a confidential basis to your tax, financial or legal advisors, your immediate family members or any prospective employer or business partner, *provided that*, in each case, such third party agrees to keep such circumstances confidential. Nothing in this Section 3 shall prohibit or restrict you from (A) providing information to, or otherwise assisting in, an internal investigation, an investigation by Congress, the Securities and Exchange Commission ("SEC"), or any other regulatory or law enforcement agency or self-regulatory organization ("SRO"); (B) testifying, participating, or otherwise assisting in a proceeding relating to an alleged violation of any law relating to fraud or any rule or regulation of the SEC or any SRO or other regulatory agency or in an internal investigation by Bank or its Affiliates; (C) initiating testifying, participating, or otherwise assisting in any case, administrative investigation or proceeding relating to an alleged violation of any discrimination or wage law or other law; or (D) responding to a duly served subpoena, *provided that* you promptly give Bank written notice thereof so that Bank may consider what steps it can take to preserve the confidentiality of such information.

4. Confidential and Proprietary Information. You agree that all inventions, copyrightable material, trade secrets or other work conceived, developed or otherwise performed by you in the scope of your employment (during or after business hours) that are related to the financial services industry or related to Bank products, services or supporting activities were or will promptly be disclosed to your manager, are the sole property of Bank and its Affiliates, and are "works for hire" that are owned by Bank. You agree that while you are employed by Bank or its Affiliates and following termination of your employment for any reason, you will do whatever Bank deems necessary to transfer to Bank or its Affiliates, or to document Bank's ownership of, any such property. You further agree not to challenge Bank's ownership rights in such intellectual property, or claim that such intellectual property is owned or co-owned by another person or entity, including yourself. Furthermore, you agree not to use such intellectual property in any way or to attempt to transfer such intellectual property to any other person or entity. The above requirements will not apply to any invention that you develop entirely on your own time and to which all of the following apply: (a) no equipment, supplies, facilities, software or Confidential Information (as defined below) of Bank or any of its Affiliates are used; (b) such invention is not related to Bank's actual or demonstrably anticipated research and development (or that of any of Bank's Affiliates); and (c) such invention does not result from any work performed by you for Bank or any of its Affiliates. You agree that Bank and its Affiliates expend substantial time, effort and resources identifying customers with particular needs or characteristics which Bank and its Affiliates seek to address and that information or lists of any kind pertaining to the identity, contact date, needs and characteristics of such customers, or to the terms and conditions of such customers' business relationship with Bank or its Affiliates,

constitutes Confidential Information (as defined below) and is proprietary to and a trade secret of Bank and its Affiliates and may not be used by you for any purpose other than in your employment by or service to Bank or its Affiliates. You also agree that the provisions of the immediately preceding sentence shall apply to information pertaining to prospective customers of Bank or its Affiliates. You further agree that following termination of your employment for any reason, you will not, without prior written consent or as otherwise required by law, disclose or publish (directly or indirectly) any Confidential Information to any person or use, copy, transmit or remove (or attempt to use, copy, transmit or remove) any Confidential Information for any purpose. Nothing in this Section 4 shall prohibit or restrict you from (A) providing information to, or otherwise assisting in, an internal investigation, an investigation by Congress, the SEC, or any other regulatory or law enforcement agency or SRO, (B) testifying, participating, or otherwise assisting in a proceeding relating to an alleged violation of any federal law relating to fraud or any rule or regulation of the SEC or any SRO or other regulatory agency or in an internal investigation by Bank or an Affiliate, (C) initiating, testifying, participating, or otherwise assisting in any case, administrative investigation or proceeding relating to an alleged violation of any discrimination or wage law or other law, or (D) responding to a duly served subpoena, *provided that* you promptly give Bank written notice thereof so that Bank may consider what steps it can take to preserve the confidentiality of such information. For the avoidance of doubt, you and Bank agree that no confidentiality, non-disparagement or other obligation you owe to Bank prohibits you from reporting possible violations of U.S. Federal law or regulation to any governmental agency or entity under any whistleblower protection provision of U.S. Federal or U.S. State law or regulation (including Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002) or requires you to notify Bank of any such report. In making any such report, however, you are not authorized to disclose communications with counsel that were made for the purpose of receiving legal advice, that contain legal advice or that are protected by the attorney work product or similar privilege. You are hereby notified that the immunity provisions in Section 1833 of title 18 of the United States Code provide that an individual cannot be held criminally or civilly liable under any federal or state trade secret law for any disclosure of a trade secret that is made (a) in confidence to federal, state or local government officials, either directly or indirectly, or to an attorney, and is solely for the purpose of reporting or investigating a suspected violation of the law, (b) under seal in a complaint or other document filed in a lawsuit or other proceeding, or (c) to your attorney in connection with a lawsuit for retaliation for reporting a suspected violation of law (and the trade secret may be used in the court proceedings for such lawsuit) as long as any document containing the trade secret is filed under seal and the trade secret is not disclosed except pursuant to court order.

5. Cooperation. You agree (a) to provide truthful and complete cooperation, including but not limited to, your appearance at interviews and depositions, in all legal matters, including but not limited to, regulatory and litigation proceedings relating to your employment or areas of responsibility at Bank or its Affiliates, whether or not such matters have already been commenced, and (b) to provide Bank's counsel, upon request, all documents or electronic media in your possession or control relating to such regulatory or litigation matter.

6. Reasonableness of Covenant. You agree that the covenants contained herein are reasonable and necessary to protect the confidentiality of the customer lists, the terms, conditions and nature of customer relationships, and other trade secrets and Confidential

Information concerning Bank and its Affiliates, acquired by you and to avoid actual or apparent conflicts of interest.

7. Injunctive Relief. Without limiting any remedies available to Bank, including the remedies set forth in Section 1(c) of the Agreement, you acknowledge and agree that a breach of the covenants contained in Sections 1-5 of this Appendix A will result in injury to Bank and its Affiliates for which there is no adequate remedy at law and that it will not be possible to measure damages for such injuries precisely. Therefore, you agree that, in the event of such a breach or threat thereof, Bank shall be entitled to seek a temporary restraining order and a preliminary and permanent injunction, without bond or other security, restraining you from engaging in activities prohibited by Sections 1-5 of this Appendix A or such other relief as may be required specifically to enforce any of the covenants in Sections 1-5 of this Appendix A.

8. Definitions. For purposes of these covenants, the following terms shall have the following meanings:

(a) "Competitive Business" means any business enterprise that either (i) engages in any activity that competes with the business of Bank or its Affiliates or (ii) holds a 5% or greater equity, voting or profit participation interest in any enterprise that engages in such a competitive activity.

(b) "Confidential Information" means any information concerning the business or affairs of Bank or any of its Affiliates which is not generally known to the public and includes, but is not limited to, any file, document, book, account, list (including without limitation customer lists), process, patent, specification, drawing, design, computer program or file, computer disk, method of operation, recommendation, report, plan, survey, data, manual, strategy, financial data, client information or data (including the terms and conditions of any business relationships between clients and Bank or its Affiliates), or contract which comes to your knowledge in the course of your employment or which is generated by you in the course of performing your obligations to Bank whether alone or with others.

9. [Additional Agreements. For the avoidance of doubt, to the extent you are a party to one or more written agreements with Bank or any Affiliate that contain any confidentiality, non-competition, non-solicitation or non-disparagement covenants, those covenants and related enforcement provisions are deemed part of, and are hereby incorporated into, this Agreement, and the grant of the RSUs shall be deemed additional consideration for your continued compliance with such restrictions.]

First Republic Bank

By: /s/ Michael J. Roffler

Participant Name: ____________________________

Accepted on: ____________________________

EXHIBIT 31.1

CERTIFICATION

I, James H. Herbert, II, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of First Republic Bank;

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 period 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 we 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 the 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: May 8, 2020

/s/ James H. Herbert, II
Name: James H. Herbert, II
Title: Chairman and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Michael J. Roffler, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of First Republic Bank;

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 period 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 we 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 the 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: May 8, 2020

/s/ Michael J. Roffler
Name: Michael J. Roffler
Title: Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

Certification of Chief Executive Officer
Pursuant to §906 of The Sarbanes-Oxley Act of 2002

The undersigned, the Chairman and Chief Executive Officer of First Republic Bank (the "Company"), hereby certifies on the date hereof, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (the "Form 10-Q"), filed concurrently herewith by the Company, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2020

/s/ James H. Herbert, II

Name: James H. Herbert, II
Title: Chairman and Chief Executive Officer

EXHIBIT 32.2

Certification of Chief Financial Officer
Pursuant to §906 of The Sarbanes-Oxley Act of 2002

The undersigned, the Executive Vice President and Chief Financial Officer of First Republic Bank (the "Company"), hereby certifies on the date hereof, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (the "Form 10-Q"), filed concurrently herewith by the Company, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2020

/s/ Michael J. Roffler

Name: Michael J. Roffler
Title: Executive Vice President and Chief Financial Officer