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 September 30, 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 5.50% 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**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 4.125% Noncumulative Perpetual Series K Preferred Stock	**FRC-PrK**	**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 October 30, 2020 was 172,209,178.

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GLOSSARY OF ACRONYMS AND TERMS

The following listing provides a reference to common acronyms and terms used throughout this report:

ACL	Allowance for Credit Losses
ALM	Asset Liability Management
ARM	Adjustable-Rate Mortgage
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
AUA	Assets Under Administration
AUM	Assets Under Management
bp	Basis Point
CARES Act	Coronavirus Aid, Relief and Economic Security Act
CD	Certificate of Deposit
CECL	Current Expected Credit Losses
CET1	Common Equity Tier 1
CLTV	Combined Loan-to-Value Ratio
CMT	Constant Maturity Treasury
COFI	11th District Monthly Weighted Average Cost of Funds Index
COVID-19	COVID-19 Pandemic
CPR	Constant Prepayment Rate
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act
DTA	Deferred Tax Asset
EGRRCPA	Economic Growth, Regulatory Relief, and Consumer Protection Act
EPS	Earnings Per Common Share
FASB	Financial Accounting Standards Board
FCA	Financial Conduct Authority
FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Federal Reserve Bank
FHLB	Federal Home Loan Bank
FOMC	Federal Open Market Committee of the Federal Reserve System
FRIM	First Republic Investment Management, Inc.
FRLC	First Republic Lending Corporation
FRSC	First Republic Securities Company, LLC
FRTC Delaware	First Republic Trust Company of Delaware LLC
FRTC Wyoming	First Republic Trust Company of Wyoming, LLC
GAAP	Accounting Principles Generally Accepted in the United States of America
HELOC	Home Equity Line of Credit
HQLA	High-Quality Liquid Assets
LGD	Loss Given Default
LIBOR	London Interbank Offered Rate
LTV	Loan-to-Value Ratio
MBS	Mortgage-Backed Securities
MSR	Mortgage Servicing Right
NAV	Net Asset Value
PD	Probability of Default
PPP	SBA's Paycheck Protection Program
PSU	Performance Share Unit
RSA	Restricted Stock Award
RSU	Restricted Stock Unit
SBA	U.S. Small Business Administration
SOFR	Compounded Secured Overnight Funding Rate
TDR	Troubled Debt Restructuring
Trust Company	First Republic Trust Company, First Republic Trust Company of Delaware LLC, and First Republic Trust Company of Wyoming, LLC
VIE	Variable Interest Entity

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

FIRST REPUBLIC BANK

CONSOLIDATED BALANCE SHEETS

(Unaudited)

(in thousands, except share amounts)	September 30, 2020	December 31, 2019
ASSETS		
Cash and cash equivalents	$ 3,691,149	$ 1,699,557
Debt securities available-for-sale (amortized cost of $1,678,061 and no allowance for credit losses at September 30, 2020)	1,711,202	1,282,169
Debt securities held-to-maturity (fair value of $18,123,266 and $17,765,944 at September 30, 2020 and December 31, 2019, respectively)	16,929,422	17,147,633
Less: Allowance for credit losses	(5,716)	—
Debt securities held-to-maturity, net	16,923,706	17,147,633
Equity securities (fair value)	20,478	19,586
Loans	104,761,651	90,796,831
Less: Allowance for credit losses	(604,747)	(496,104)
Loans, net	104,156,904	90,300,727
Loans held for sale	33,655	23,304
Investments in life insurance	1,949,360	1,434,642
Tax credit investments	1,099,713	1,100,509
Premises, equipment and leasehold improvements, net	390,241	386,841
Goodwill and other intangible assets	229,185	235,269
Other assets	3,020,178	2,633,397
Total Assets	$ 133,225,771	$ 116,263,634
LIABILITIES AND EQUITY		
Liabilities:		
Deposits:		
Noninterest-bearing checking	$ 41,538,676	$ 33,124,265
Interest-bearing checking	26,081,189	19,696,859
Money market checking	15,868,769	12,790,707
Money market savings and passbooks	11,419,289	10,586,355
Certificates of deposit	9,495,453	13,935,060
Total Deposits	104,403,376	90,133,246
Short-term borrowings	5,000	800,000
Long-term FHLB advances	13,505,000	12,200,000
Senior notes	995,626	497,719
Subordinated notes	778,204	777,885
Other liabilities	2,193,956	2,003,677
Total Liabilities	121,881,162	106,412,527
Shareholders' Equity:		
Preferred stock, $0.01 par value per share; 25,000,000 shares authorized; 1,645,000 and 1,145,000 shares issued and outstanding at September 30, 2020 and December 31, 2019, respectively	1,645,000	1,145,000
Common stock, $0.01 par value per share; 400,000,000 shares authorized; 172,187,825 and 168,620,708 shares issued and outstanding at September 30, 2020 and December 31, 2019, respectively	1,722	1,686
Additional paid-in capital	4,571,499	4,214,915
Retained earnings	5,102,229	4,484,375
Accumulated other comprehensive income	24,159	5,131
Total Shareholders' Equity	11,344,609	9,851,107
Total Liabilities and Shareholders' Equity	$ 133,225,771	$ 116,263,634

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(Unaudited)

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands, except per share amounts)	**2020**	**2019**	**2020**	**2019**
Interest income:				
Loans	$ 811,708	$ 764,468	$ 2,399,646	$ 2,205,884
Investments	142,971	134,099	438,055	401,908
Other	6,116	5,779	18,135	15,767
Cash and cash equivalents	1,181	5,430	5,685	18,966
Total interest income	961,976	909,776	2,861,521	2,642,525
Interest expense:				
Deposits	54,355	134,917	245,680	371,852
Borrowings	77,341	79,874	246,017	226,624
Total interest expense	131,696	214,791	491,697	598,476
Net interest income	830,280	694,985	2,369,824	2,044,049
Provision for credit losses	28,538	16,711	122,025	52,111
Net interest income after provision for credit losses	801,742	678,274	2,247,799	1,991,938
Noninterest income:				
Investment management fees	96,638	83,582	281,017	262,226
Brokerage and investment fees	10,796	12,673	39,028	28,619
Insurance fees	2,216	2,712	6,086	8,522
Trust fees	4,543	4,105	14,118	12,221
Foreign exchange fee income	12,575	11,685	34,864	30,661
Deposit fees	5,753	6,563	17,598	19,462
Loan and related fees	7,171	5,341	20,741	13,644
Loan servicing fees, net	144	2,347	(2,649)	9,560
Gain on sale of loans	13,797	122	14,575	466
Gain (loss) on investment securities	(405)	(683)	3,752	(1,895)
Income from investments in life insurance	20,546	12,152	36,506	31,536
Other income (loss)	(2,791)	1,608	960	4,853
Total noninterest income	170,983	142,207	466,596	419,875
Noninterest expense:				
Salaries and employee benefits	373,225	309,655	1,078,633	920,432
Information systems	74,549	66,612	219,301	204,059
Occupancy	55,543	50,722	164,125	142,204
Professional fees	19,845	17,507	48,479	45,623
Advertising and marketing	8,909	15,912	29,373	48,346
FDIC assessments	11,003	9,748	32,463	27,847
Other expenses	65,136	63,794	187,311	199,105
Total noninterest expense	608,210	533,950	1,759,685	1,587,616
Income before provision for income taxes	364,515	286,531	954,710	824,197
Provision for income taxes	71,378	51,687	186,119	140,198
Net income	293,137	234,844	768,591	683,999
Dividends on preferred stock	14,816	12,787	42,653	38,362
Net income available to common shareholders	$ 278,321	$ 222,057	$ 725,938	$ 645,637
Net income	$ 293,137	$ 234,844	$ 768,591	$ 683,999
Other comprehensive income (loss), net of tax:				
Net unrealized gain (loss) on debt securities available-for-sale	(2,866)	9,354	19,456	27,725
Reclassification of loss on debt securities available-for-sale to net income	—	625	81	2,044
Amortization of unrealized gain on debt securities transferred from available-for-sale to held-to-maturity	(166)	(170)	(509)	(556)
Other comprehensive income (loss)	(3,032)	9,809	19,028	29,213
Comprehensive income	$ 290,105	$ 244,653	$ 787,619	$ 713,212
Basic earnings per common share	$ 1.62	$ 1.32	$ 4.23	$ 3.85
Diluted earnings per common share	$ 1.61	$ 1.31	$ 4.21	$ 3.81

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
At or for the Quarters Ended September 30, 2020 and 2019							
Balance at June 30, 2020	**172,093,572**	**$1,145,000**	**$ 1,721**	**$4,543,051**	**$4,858,965**	**$ 27,191**	**$ 10,575,928**
Net income	—	—	—	—	293,137	—	293,137
Other comprehensive loss	—	—	—	—	—	(3,032)	(3,032)
Issuance of preferred stock, net	—	500,000	—	(8,039)	—	—	491,961
Stock compensation expense	—	—	—	34,372	—	—	34,372
Net issuance of common stock under stock plans	94,253	—	1	2,115	—	—	2,116
Dividends on preferred stock (see Note 12)	—	—	—	—	(14,816)	—	(14,816)
Dividends on common stock ($0.20/share)	—	—	—	—	(35,057)	—	(35,057)
Balance at September 30, 2020	**172,187,825**	**$1,645,000**	**$ 1,722**	**$4,571,499**	**$5,102,229**	**$ 24,159**	**$ 11,344,609**
Balance at June 30, 2019	**168,176,437**	**$ 940,000**	**$ 1,682**	**$4,186,304**	**$4,091,636**	**$ 21**	**$ 9,219,643**
Net income	—	—	—	—	234,844	—	234,844
Other comprehensive income	—	—	—	—	—	9,809	9,809
Stock compensation expense	—	—	—	25,470	—	—	25,470
Net issuance of common stock under stock plans	274,016	—	3	(13,332)	—	—	(13,329)
Dividends on preferred stock (see Note 12)	—	—	—	—	(12,787)	—	(12,787)
Dividends on common stock ($0.19/share)	—	—	—	—	(32,444)	—	(32,444)
Balance at September 30, 2019	**168,450,453**	**$ 940,000**	**$ 1,685**	**$4,198,442**	**$4,281,249**	**$ 9,830**	**$ 9,431,206**
At or for the Nine Months Ended September 30, 2020 and 2019							
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	—	—	—	—	768,591	—	768,591
Other comprehensive income	—	—	—	—	—	19,028	19,028
Issuance of preferred stock, net	—	500,000	—	(8,039)	—	—	491,961
Issuance of common stock, net	2,500,000	—	25	290,575	—	—	290,600
Stock compensation expense	—	—	—	105,457	—	—	105,457
Net issuance of common stock under stock plans	1,067,117	—	11	(31,409)	—	—	(31,398)
Dividends on preferred stock (see Note 12)	—	—	—	—	(42,653)	—	(42,653)
Dividends on common stock ($0.59/share)	—	—	—	—	(103,407)	—	(103,407)
Balance at September 30, 2020	**172,187,825**	**$1,645,000**	**$ 1,722**	**$4,571,499**	**$5,102,229**	**$ 24,159**	**$ 11,344,609**
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	—	—	—	—	683,999	—	683,999
Other comprehensive income	—	—	—	—	—	29,213	29,213
Issuance of common stock, net	2,000,000	—	20	170,565	—	—	170,585
Stock compensation expense	—	—	—	76,824	—	—	76,824
Net issuance of common stock under stock plans	1,548,503	—	16	(73,253)	—	—	(73,237)
Dividends on preferred stock (see Note 12)	—	—	—	—	(38,362)	—	(38,362)
Dividends on common stock ($0.56/share)	—	—	—	—	(95,593)	—	(95,593)
Balance at September 30, 2019	**168,450,453**	**$ 940,000**	**$ 1,685**	**$4,198,442**	**$4,281,249**	**$ 9,830**	**$ 9,431,206**

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK

CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

($ in thousands)	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Operating Activities:		
Net income	$ 768,591	$ 683,999
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	122,025	52,111
Depreciation, amortization and accretion, net	114,060	87,594
Amortization of mortgage servicing rights	10,478	10,268
Provision for mortgage servicing rights in excess of fair value	8,139	630
Deferred income taxes	(59,022)	(43,595)
Gain on sale of loans	(14,575)	(466)
(Gain) loss on investment securities	(3,752)	1,895
Noncash cost of stock plans	105,457	76,824
Other net losses	1,516	—
Loans originated or purchased for sale	(769,766)	(381,730)
Proceeds from sales and principal repayments of loans held for sale	162,968	95,076
Decrease in other assets	5,014	59,006
Increase (decrease) in other liabilities	(32,625)	1,160,592
Net Cash Provided by Operating Activities	418,508	1,802,204
Investing Activities:		
Loan originations, net of principal collections	(14,184,115)	(10,514,196)
Loans purchased	(758,135)	(14,667)
Loans sold	953,246	151,256
Purchases of debt securities available-for-sale	(288,989)	(401,242)
Proceeds from sales and paydowns of debt securities available-for-sale	456,460	1,106,722
Purchases of debt securities held-to-maturity	(1,939,642)	(2,891,114)
Proceeds from sales, calls and paydowns of debt securities held-to-maturity	2,214,358	1,326,575
Purchases of FHLB stock and other investments	(126,158)	(232,706)
Proceeds from redemptions of FHLB stock and sales of other investments	74,836	176,816
Purchases of investments in life insurance	(488,147)	(18,147)
Net change in tax credit and other investments	(125,488)	(97,653)
Additions to premises, equipment and leasehold improvements, net	(100,844)	(121,016)
Net Cash Used for Investing Activities	(14,312,618)	(11,529,372)
Financing Activities:		
Net increase in deposits	14,274,636	6,659,186
Net increase (decrease) in short-term borrowings	(795,000)	675,000
Proceeds from long-term debt	6,155,000	4,700,000
Repayment of long-term debt	(4,350,000)	(2,900,000)
Payment of long-term debt issuance costs	(3,503)	—
Net proceeds from issuance of preferred stock	491,961	—
Net proceeds from issuance of common stock	290,600	170,585
Proceeds from employee stock purchase plan and stock options exercised	17,491	13,276
Payments of employee taxes withheld from share-based awards	(49,423)	(86,483)
Dividends on preferred stock	(42,653)	(38,362)
Dividends on common stock	(103,407)	(95,593)
Net Cash Provided by Financing Activities	15,885,702	9,097,609
Increase (Decrease) in Cash and Cash Equivalents	1,991,592	(629,559)
Cash and Cash Equivalents at the Beginning of Period	1,699,557	2,811,159
Cash and Cash Equivalents at the End of Period	$ 3,691,149	$ 2,181,600
Supplemental Disclosure of Cash Flow Items:		
Cash paid:		
Interest	$ 522,597	$ 598,602
Income taxes	$ 104,406	$ 120,340
Non-cash activities:		
Transfer of loans to held for sale	$ 963,874	$ 86,763
Transfer of loans to debt securities available-for-sale	$ 587,607	$ 279,107

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 FDIC. First Republic has operated for 35 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: FRIM, FRSC, FRTC Delaware, FRTC Wyoming and 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 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. 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. The Trust Company provides 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 nine months ended September 30, 2020, the Bank adopted the following ASUs issued by the FASB:

ASU 2016-13—Financial Instruments—Credit Losses (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 ACL be based on 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 ACL 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 ACL on held-to-maturity debt securities, loans, and unfunded loan commitments, and DTAs 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 credit losses—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 is also 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 ACL. 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 on 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 sheets.

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 ACL on interest receivable.

Allowance for Credit Losses on 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 ACL is recognized.

Beginning January 1, 2020, the ACL 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 ACL 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 ACL on available-for-sale and held-to-maturity 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 sheets.

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 ACL on interest receivable.

Allowance for Credit Losses on Loans and Unfunded Loan Commitments

Beginning January 1, 2020, the ACL on 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 ACL 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 ACL 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 for the quarter and nine months ended September 30, 2020, credit loss expense is recorded as provision for unfunded loan commitments within provision for credit losses in the consolidated statement of income. For the quarter and nine months ended September 30, 2019, the provision for unfunded loan commitments was recorded in other noninterest expense. 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 ACL 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 ACL, goodwill, identifiable intangible assets, fair value measurements, and income taxes.

The Bank's estimates for the quarter ended September 30, 2020 incorporate consideration of the impact of COVID-19. Refer to Note 4, "Loans and Allowance for Credit Losses—Changes in the Allowance for Credit Losses on Loans for the Quarter and Nine Months Ended September 30, 2020," for additional discussion.

COVID-19 Loan Modifications

Loan modifications to assist borrowers who are experiencing financial difficulties as a result of COVID-19 generally include deferring scheduled principal and/or interest payments for six months. For certain loans, the maturity of the loan may also be extended to allow for monthly payments to remain the same as they were pre-modification. Interest continues to accrue during the deferral period, and the deferred payments may be included in the borrower's final payment as a balloon payment, reamortized over the remaining maturity of the loan, or repaid over the extended term utilizing the pre-modification monthly payments, subject to the borrower's loan terms.

On March 27, 2020, the U.S. Government enacted 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 TDRs 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, including subsequent 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 TDRs. Further, on April 7, 2020, the federal banking agencies released an interagency statement (the "Interagency Guidance") to provide guidance on accounting for loan modifications not eligible under the CARES Act provision. For such loans, short-term loan modifications, including subsequent modifications, made for borrowers impacted by COVID-19 who were current, or less than 30 days past due, as of the modification date would also not be considered TDRs. Loan modifications are considered short-term if the cumulative deferral period is six months or less.

Loan modifications made to borrowers impacted by COVID-19 are predominantly not reported as nonaccrual. In addition, the deferrals may result in delayed delinquency status for borrowers who would otherwise be past due.

Refer to Note 4, "Loans and Allowance for Credit Losses—COVID-19 Loan Modifications," for information about these loan modifications as of September 30, 2020.

Note 2. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from the 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 September 30, 2020.

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

($ in thousands)	September 30, 2020	December 31, 2019
Cash and due from banks	$ 401,740	$ 361,932
Interest-bearing deposits with banks	3,289,409	1,337,625
Total cash and cash equivalents	$ 3,691,149	$ 1,699,557

Note 3. Investment Securities and Allowance for Credit Losses

The Bank adopted ASC 326 effective January 1, 2020. ASC 326 requires recognition of an ACL on debt securities and requires certain additional or revised disclosures for investments in debt securities and the related ACL. 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:

	September 30, 2020				
($ in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Value
Debt securities available-for-sale:					
Agency residential MBS	$ 812,829	$ 7,304	$ (2,954)	$ —	$ 817,179
Other residential MBS	22,767	306	(47)	—	23,026
Agency commercial MBS	795,176	28,352	(4)	—	823,524
Securities of U.S. states and political subdivisions—taxable	47,289	184	—	—	47,473
Total	$ 1,678,061	$ 36,146	$ (3,005)	$ —	$ 1,711,202

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

($ in thousands)	September 30, 2020 Amortized Cost	September 30, 2020 Gross Unrealized Gains	September 30, 2020 Gross Unrealized Losses	September 30, 2020 Fair Value	September 30, 2020 Allowance for Credit Losses	September 30, 2020 Amortized Cost, Net of Allowance
Debt securities held-to-maturity:						
U.S. Government-sponsored agency securities	$ 50,000	$ —	$ (676)	$ 49,324	$ —	$ 50,000
Agency residential MBS	1,695,377	43,218	—	1,738,595	—	1,695,377
Other residential MBS	13,983	154	—	14,137	—	13,983
Agency commercial MBS	2,760,528	175,803	—	2,936,331	—	2,760,528
Securities of U.S. states and political subdivisions:						
Tax-exempt municipal securities	11,559,458	914,735	(2,302)	12,471,891	(5,384)	11,554,074
Tax-exempt nonprofit debentures	115,042	675	—	115,717	(151)	114,891
Taxable municipal securities	710,956	59,788	—	770,744	(170)	710,786
Corporate debt securities	24,078	2,449	—	26,527	(11)	24,067
Total	$ 16,929,422	$ 1,196,822	$ (2,978)	$ 18,123,266	$ (5,716)	$ 16,923,706

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

($ in thousands)	September 30, 2020
Equity securities (fair value):	
Mutual funds and marketable equity securities	$ 20,478

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	December 31, 2019 Gross Unrealized Gains	December 31, 2019 Gross Unrealized Losses	December 31, 2019 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 sheets exclude interest receivable since the Bank elected to present interest receivable within "Other assets." The following table presents interest receivable on debt securities:

	September 30, 2020	
($ in thousands)	Debt securities available-for-sale	Debt securities held-to-maturity
Interest receivable	$ 2,800	$ 105,149

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 reflect 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:

	September 30, 2020				
($ in thousands)	**AAA (Aaa)**	**AA (Aa)**	**A (A)**	**BBB (Baa)**	**Total**
Debt securities held-to-maturity:					
U.S. Government-sponsored agency securities	$ —	$ 50,000	$ —	$ —	$ 50,000
Agency residential MBS	—	1,695,377	—	—	1,695,377
Other residential MBS	13,634	349	—	—	13,983
Agency commercial MBS	—	2,760,528	—	—	2,760,528
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	3,014,242	8,286,087	259,129	—	11,559,458
Tax-exempt nonprofit debentures	—	—	59,555	55,487	115,042
Taxable municipal securities	186,594	524,362	—	—	710,956
Corporate debt securities	—	24,078	—	—	24,078
Total	$ 3,214,470	$ 13,340,781	$ 318,684	$ 55,487	$ 16,929,422

The carrying value of held-to-maturity debt securities that were internally rated and translated to a corresponding external grade was $123.3 million at September 30, 2020, of which $115.0 million were tax-exempt nonprofit debentures and $8.3 million were tax-exempt municipal securities.

Aging and Nonaccrual

As of both September 30, 2020 and December 31, 2019, there were no debt securities past due or on nonaccrual status.

Allowance for Credit Losses

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:

	September 30, 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	$ (2,940)	$ 369,442	$ (14)	$ 1,842	$ (2,954)	$ 371,284	149
Other residential MBS	(47)	3,442	—	—	(47)	3,442	3
Agency commercial MBS	(4)	865	—	—	(4)	865	1
Total	$ (2,991)	$ 373,749	$ (14)	$ 1,842	$ (3,005)	$ 375,591	153

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, no ACL was recognized on available-for-sale debt securities as of September 30, 2020.

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 ACL has been recognized on these securities.

Held-to-maturity debt securities with similar risk characteristics are pooled when developing the ACL. The Bank's ACL on 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 PD/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 LGD 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 ACL on corporate debt securities is based on, among other factors, the financial condition of the issuer and structure of the security.

The increase in the ACL on held-to-maturity debt securities during the nine months ended September 30, 2020 was primarily driven by investment purchases.

The following tables present the activity in the ACL on held-to-maturity debt securities:

	At or for the Quarter Ended September 30, 2020				
($ in thousands)	**Balance at Beginning of Period**	**Provision (Reversal of 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	$ 4,971	$ 413	$ —	$ —	$ 5,384
Tax-exempt nonprofit debentures	227	(76)	—	—	151
Taxable municipal securities	174	(4)	—	—	170
Corporate debt securities	11	—	—	—	11
Total	$ 5,383	$ 333	$ —	$ —	$ 5,716

	At or for the Nine Months Ended September 30, 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	$ 952	$ —	$ —	$ 5,384
Tax-exempt nonprofit debentures	100	51	—	—	151
Taxable municipal securities	127	43	—	—	170
Corporate debt securities	10	1	—	—	11
Total	$ 4,669	$ 1,047	$ —	$ —	$ 5,716

(1) Represents the ACL after the transition adjustments from the adoption of CECL.

Debt Securities Available-for-Sale and Held-to-Maturity 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 and nine months ended September 30, 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 September 30, 2020, the carrying value of investment securities pledged was $4.40 billion, of which $4.39 billion was unencumbered and available to support additional borrowings.

During the nine months ended September 30, 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 investment securities:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Debt securities available-for-sale:				
Sales proceeds	$ —	$ 501,677	$ 70,868	$ 695,306
Debt securities held-to-maturity:				
Sales proceeds	$ —	$ —	$ 34,822	$ —
Equity securities (fair value):				
Sales proceeds	$ 221	$ —	$ 221	$ —

The following table presents gains and losses on investment securities:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Debt securities available-for-sale:				
Gross realized gains on sales	$ —	$ 200	$ 37	$ 200
Gross realized losses on sales	—	(1,090)	(151)	(3,112)
Debt securities held-to-maturity:				
Gross realized gains on sales	—	—	2,753	—
Equity securities (fair value):				
Gross realized losses on sales	(10)	—	(10)	—
Net change in fair value	(395)	207	1,123	1,017
Total gain (loss) on investment securities	$ (405)	$ (683)	$ 3,752	$ (1,895)

The following table presents interest income on investment securities:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Interest income on tax-exempt securities	$ 97,651	$ 80,296	$ 286,915	$ 232,156
Interest income on taxable securities	45,320	53,803	151,140	169,752
Total	$ 142,971	$ 134,099	$ 438,055	$ 401,908

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.

	Available-for-sale				
($ in thousands)	Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At September 30, 2020					
Amortized cost:					
Agency residential MBS	$ 812,829	$ 753	$ 1,666	$ —	$ 810,410
Other residential MBS	22,767	—	—	—	22,767
Agency commercial MBS	795,176	868	132,267	136,557	525,484
Securities of U.S. states and political subdivisions—taxable	47,289	—	—	—	47,289
Total	$ 1,678,061	$ 1,621	$ 133,933	$ 136,557	$ 1,405,950
Fair value:					
Agency residential MBS	$ 817,179	$ 753	$ 1,654	$ —	$ 814,772
Other residential MBS	23,026	—	—	—	23,026
Agency commercial MBS	823,524	865	132,419	137,597	552,643
Securities of U.S. states and political subdivisions—taxable	47,473	—	—	—	47,473
Total	$ 1,711,202	$ 1,618	$ 134,073	$ 137,597	$ 1,437,914

	Held-to-maturity				
($ in thousands)	Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At September 30, 2020					
Amortized cost, net of allowance:					
U.S. Government-sponsored agency securities	$ 50,000	$ —	$ —	$ —	$ 50,000
Agency residential MBS	1,695,377	—	3,683	—	1,691,694
Other residential MBS	13,983	—	—	—	13,983
Agency commercial MBS	2,760,528	—	—	—	2,760,528
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	11,554,074	275,208	589,998	147,184	10,541,684
Tax-exempt nonprofit debentures	114,891	—	—	—	114,891
Taxable municipal securities	710,786	13,511	—	—	697,275
Corporate debt securities	24,067	—	—	—	24,067
Total	$ 16,923,706	$ 288,719	$ 593,681	$ 147,184	$ 15,894,122

	December 31, 2019	
($ in thousands)	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. ASC 326 changes the methodology for determining the ACL on loans held for investment and unfunded loan commitments. ASC 326 also requires certain additional or revised disclosures for loans and the related ACL. 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. Beginning in April 2020, the Bank became a lender under the PPP. The following table presents loans held for investment by portfolio segment and class, and the ACL:

($ in thousands)	September 30, 2020	December 31, 2019 [1]
Residential real estate		
Single family (1-4 units)	$ 56,628,359	$ 47,985,651
Home equity lines of credit	2,431,991	2,501,432
Single family construction	739,091	761,589
Total residential real estate	59,799,441	51,248,672
Income property		
Multifamily (5+ units)	13,392,531	12,353,359
Commercial real estate	7,781,797	7,449,058
Multifamily/commercial construction	2,038,949	1,695,954
Total income property	23,213,277	21,498,371
Business		
Capital call lines of credit	6,203,877	5,570,322
Tax-exempt	3,276,705	3,042,193
Other business	2,982,532	3,034,301
PPP	2,091,102	—
Total business	14,554,216	11,646,816
Other		
Stock secured	2,311,754	1,897,511
Other secured	1,780,652	1,433,399
Unsecured	3,102,311	3,072,062
Total other	7,194,717	6,402,972
Total loans held for investment	104,761,651	90,796,831
Less: Allowance for credit losses	(604,747)	(496,104)
Loans, net	$ 104,156,904	$ 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 loans held for sale:

($ in thousands)	September 30, 2020	December 31, 2019
Loans held for sale	$ 33,655	$ 23,304

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 both September 30, 2020 and December 31, 2019, approximately 51% of the total loan portfolio was secured by California real estate. At September 30, 2020 and December 31, 2019, approximately 65% and 66%, respectively, of single family mortgages fully and evenly amortize until maturity following an initial interest-only period of generally ten years.

As of September 30, 2020, the Bank had pledged $55.2 billion of loans to secure borrowings of $13.5 billion from the FHLB, although only approximately $16.9 billion of collateral was required in connection with the outstanding FHLB advances.

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

($ in thousands)	September 30, 2020
Interest receivable [(1)]	$ 307,419

[(1)] Includes $51.4 million of deferred interest from loan modifications to assist borrowers experiencing financial difficulties as a result of COVID-19. Deferred interest will be added to the principal balance of the loan at the end of the deferral period, and may be included as a final balloon payment, reamortized over the remaining loan life, or repaid over the extended term utilizing the pre-modification monthly payments.

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 September 30, 2020						
Residential real estate						
Single family (1-4 units)	$ 13,776	$ 5,070	$ 38,768	$ 57,614	$ 56,570,745	$ 56,628,359
Home equity lines of credit	2,279	285	12,840	15,404	2,416,587	2,431,991
Single family construction	—	—	8,071	8,071	731,020	739,091
Total residential real estate	16,055	5,355	59,679	81,089	59,718,352	59,799,441
Income property						
Multifamily (5+ units)	—	—	935	935	13,391,596	13,392,531
Commercial real estate	20,305	—	—	20,305	7,761,492	7,781,797
Multifamily/commercial construction	6,656	—	57,881	64,537	1,974,412	2,038,949
Total income property	26,961	—	58,816	85,777	23,127,500	23,213,277
Business						
Capital call lines of credit	—	—	—	—	6,203,877	6,203,877
Tax-exempt	—	—	—	—	3,276,705	3,276,705
Other business	15,921	687	191	16,799	2,965,733	2,982,532
PPP	—	—	—	—	2,091,102	2,091,102
Total business	15,921	687	191	16,799	14,537,417	14,554,216
Other						
Stock secured	—	—	—	—	2,311,754	2,311,754
Other secured	3,059	—	23	3,082	1,777,570	1,780,652
Unsecured	46,581	106	980	47,667	3,054,644	3,102,311
Total other	49,640	106	1,003	50,749	7,143,968	7,194,717
Total	$ 108,577	$ 6,148	$ 119,689	$ 234,414	$104,527,237	$104,761,651

($ 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 September 30, 2020 include one lending relationship totaling $77.1 million, consisting of single family, owner occupied and non-owner occupied single family construction loans.

($ in thousands)	September 30, 2020 90 Days or More Past Due and Accruing	September 30, 2020 Nonaccrual Total	September 30, 2020 Nonaccrual Total Without an Allowance	December 31, 2019 [1] 90 Days or More Past Due and Accruing	December 31, 2019 [1] Nonaccrual
Residential real estate					
Single family (1-4 units)	$ —	$ 70,646	$ 61,172	$ —	$ 59,013
Home equity lines of credit	—	23,839	10,778	—	11,158
Single family construction	—	8,071	8,071	—	—
Total residential real estate	—	102,556	80,021	—	70,171
Income property					
Multifamily (5+ units)	935	—	—	—	—
Commercial real estate	—	410	—	—	—
Multifamily/commercial construction	—	57,881	57,881	—	68,856
Total income property	935	58,291	57,881	—	68,856
Business					
Other business	—	1,582	1,078	—	2,721
Other					
Other secured	—	23	—	—	23
Unsecured	—	1,795	192	—	1,410
Total other	—	1,818	192	—	1,433
Total	$ 935	$164,247	$ 139,172	$ —	$ 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:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Actual interest income recognized	$ —	$ —	$ —	$ —
Interest income under original terms	$ 1,406	$ 1,745	$ 3,982	$ 3,150

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 an LTV 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.

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 both September 30, 2020 and December 31, 2019, the Bank did not have any residential real estate owned (acquired through foreclosure).

The carrying amount of residential mortgage loans in the process of foreclosure was $8.0 million and $7.1 million at September 30, 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 meet 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	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At September 30, 2020									
Residential real estate									
Single family (1-4 units):									
Pass	$15,910,760	$13,851,283	$7,252,874	$7,633,008	$5,320,250	$6,513,471	$ —	$ —	$ 56,481,646
Special mention	1,563	—	7,183	8,052	3,036	27,931	—	—	47,765
Substandard	2,347	6,641	3,489	10,210	34,152	42,109	—	—	98,948
	15,914,670	13,857,924	7,263,546	7,651,270	5,357,438	6,583,511	—	—	56,628,359
Home equity lines of credit:									
Pass	—	—	—	—	—	—	2,346,326	44,397	2,390,723
Special mention	—	—	—	—	—	—	10,173	206	10,379
Substandard	—	—	—	—	—	—	27,040	3,849	30,889
	—	—	—	—	—	—	2,383,539	48,452	2,431,991
Single family construction:									
Pass	142,346	278,858	223,654	64,386	16,463	3,629	—	—	729,336
Special mention	—	1,684	—	—	—	—	—	—	1,684
Substandard	—	—	—	—	—	8,071	—	—	8,071
	142,346	280,542	223,654	64,386	16,463	11,700	—	—	739,091
Total residential real estate	16,057,016	14,138,466	7,487,200	7,715,656	5,373,901	6,595,211	2,383,539	48,452	59,799,441
Income property									
Multifamily (5+ units):									
Pass	2,825,548	3,174,237	2,609,511	1,760,377	1,259,436	1,538,825	177,652	—	13,345,586
Substandard	—	46,945	—	—	—	—	—	—	46,945
	2,825,548	3,221,182	2,609,511	1,760,377	1,259,436	1,538,825	177,652	—	13,392,531
Commercial real estate:									
Pass	1,217,550	1,536,111	1,212,965	936,440	847,949	1,856,593	166,013	—	7,773,621
Special mention	—	—	2,107	—	1,785	3,874	—	—	7,766
Substandard	410	—	—	—	—	—	—	—	410
	1,217,960	1,536,111	1,215,072	936,440	849,734	1,860,467	166,013	—	7,781,797
Multifamily/commercial construction									
Pass	508,959	681,946	576,955	138,763	33,492	1,743	31,243	—	1,973,101
Special mention	7,967	—	—	—	—	—	—	—	7,967
Substandard	—	57,881	—	—	—	—	—	—	57,881
	516,926	739,827	576,955	138,763	33,492	1,743	31,243	—	2,038,949
Total income property	4,560,434	5,497,120	4,401,538	2,835,580	2,142,662	3,401,035	374,908	—	23,213,277

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($ in thousands)	2020	2019	2018	2017	2016	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At September 30, 2020									
Business									
Capital call lines of credit:									
Pass	—	42,608	124,818	—	—	—	6,036,451	—	6,203,877
Tax-exempt:									
Pass	599,673	136,691	213,348	541,274	306,330	1,470,929	—	—	3,268,245
Substandard	—	—	—	—	8,460	—	—	—	8,460
	599,673	136,691	213,348	541,274	314,790	1,470,929	—	—	3,276,705
Other business:									
Pass	560,474	620,217	377,599	280,942	144,667	257,204	707,687	—	2,948,790
Special mention	4,501	11,670	1,976	827	—	2,202	5,075	—	26,251
Substandard	—	1,228	—	2,872	—	791	2,287	—	7,178
Doubtful	—	70	—	—	—	146	97	—	313
	564,975	633,185	379,575	284,641	144,667	260,343	715,146	—	2,982,532
PPP:									
Pass	2,091,102	—	—	—	—	—	—	—	2,091,102
Total business	3,255,750	812,484	717,741	825,915	459,457	1,731,272	6,751,597	—	14,554,216
Other									
Stock secured:									
Pass	13,010	884	26,511	1,442	—	—	2,269,907	—	2,311,754
Other secured:									
Pass	145,234	200,143	158,642	123,617	56,695	46,541	1,018,671	20,789	1,770,332
Special mention	5,570	—	—	—	—	—	3,677	—	9,247
Substandard	—	—	—	—	—	—	—	1,050	1,050
Doubtful	—	—	—	—	—	23	—	—	23
	150,804	200,143	158,642	123,617	56,695	46,564	1,022,348	21,839	1,780,652
Unsecured:									
Pass	405,109	727,073	689,499	417,476	307,672	70,192	476,289	—	3,093,310
Special mention	—	—	—	—	—	—	1,181	—	1,181
Substandard	115	173	3,305	918	1,902	123	661	—	7,197
Doubtful	63	—	97	—	138	75	250	—	623
	405,287	727,246	692,901	418,394	309,712	70,390	478,381	—	3,102,311
Total other	569,101	928,273	878,054	543,453	366,407	116,954	3,770,636	21,839	7,194,717
Total	$24,442,301	$21,376,343	$13,484,533	$11,920,604	$8,342,427	$11,844,472	$13,280,680	$ 70,291	$104,761,651

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 periods indicated:

($ in thousands)	Quarter Ended September 30, 2020	Nine Months Ended September 30, 2020
Residential real estate		
Home equity lines of credit	$ 2,794	$ 5,174
Other		
Other secured	179	8,619
Total	$ 2,973	$ 13,793

Allowance for Credit Losses on Loans for the Quarter and Nine Months Ended September 30, 2020

The Bank estimates its ACL using quantitative 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 Models

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

The quantitative 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. These models also account for prepayments during the life of the loan. The Bank currently uses a single macroeconomic scenario in estimating expected credit losses. On a quarterly or more frequent 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 quantitative models determine estimated loss amounts based on the macroeconomic forecast scenario, prepayment (or repayment) projections and, in most cases, loan specific risk characteristics. Macroeconomic forecasts include various factors, but the most impactful to our loan portfolios are residential home price indices, commercial real estate price indices, apartment price indices, unemployment rates, and interest rates, which impact prepayment (or repayment) estimates.

For PD/LGD models, loan specific risk characteristics include LTV and credit scores for residential real estate, LTV and debt service coverage ratios for income property loans and tax-exempt business loans, and risk grade and past due status for other business loans. PD/LGD models estimate the likelihood that a loan will default and measure the loss the Bank would incur if that loan defaults. 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. For other secured and certain unsecured loans, the loss rate models use the relationship between historical losses and macroeconomic factors to determine an expected 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, for which a 15-year historical period is used.

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 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 commitment size and expected line utilization. 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 resulting from asset-specific risk characteristics and current 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 impact the measurement of 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 TDR are generally individually assessed for expected credit losses. Certain loans modified as a result of COVID-19 are also individually assessed. 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 September 30, 2020, the Bank's collateral dependent loans, which included single family loans, HELOCs, owner-occupied and non-owner occupied single family construction loans, and unsecured loans, had an amortized cost of $140.0 million, with an associated total allowance of $812,000. Collateral dependent single family loans, HELOCs and owner-occupied single family construction loans 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.

TDR Loans: The Bank grants concessions in TDRs when a borrower is experiencing financial difficulties. TDR loans that are collateral dependent follow the assessment described under "Collateral Dependent Loans" above. For TDR 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 and Certain COVID-19 Loan Modifications: For criticized or classified loans (that are not collateral dependent or TDRs) and certain COVID-19 loan modifications, 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.

PPP Loans

Loans originated by the Bank under the PPP are 100% guaranteed by the SBA. Due to this explicit guarantee, PPP loans are considered not to have any expected credit losses. Therefore, no ACL has been recognized on these loans.

Provision for Credit Losses

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

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Provision for credit losses:				
Debt securities held-to-maturity [1]	$ 333	$ —	$ 1,047	$ —
Loans	22,437	16,711	113,305	52,111
Unfunded loan commitments [2]	5,768	—	7,673	—
Total	$ 28,538	$ 16,711	$ 122,025	$ 52,111

[1] Refer to Note 3, “Investment Securities and Allowance for Credit Losses,” for disclosures of the ACL on held-to-maturity debt securities.

[2] The provision for unfunded loan commitments is included in the provision for credit losses for 2020 periods. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense, which is not presented in this table.

Changes in the Allowance for Credit Losses on Loans for the Quarter and Nine Months Ended September 30, 2020

The ACL on loans increased during the quarter and nine months ended September 30, 2020 primarily due to loan growth and an economic outlook reflecting the impact of COVID-19. There were no changes to the reasonable and supportable forecast period, the reversion period, or any significant methodology changes during the quarter and nine months ended September 30, 2020. The following tables present the changes in the ACL on loans:

($ in thousands)	At or for the Quarter Ended September 30, 2020 Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period
Residential real estate					
Single family (1-4 units)	$ 125,642	$ 4,373	$ (1,639)	$ 6	$ 128,382
Home equity lines of credit	10,386	(690)	(97)	12	9,611
Single family construction	3,227	516	—	—	3,743
Total residential real estate	139,255	4,199	(1,736)	18	141,736
Income property					
Multifamily (5+ units)	120,293	2,175	—	—	122,468
Commercial real estate	70,390	(693)	—	—	69,697
Multifamily/commercial construction	33,054	1,386	—	—	34,440
Total income property	223,737	2,868	—	—	226,605
Business					
Capital call lines of credit	66,335	8,112	—	—	74,447
Tax-exempt	35,778	(975)	—	—	34,803
Other business	63,573	(60)	—	31	63,544
PPP	—	—	—	—	—
Total business	165,686	7,077	—	31	172,794
Other					
Stock secured	—	—	—	—	—
Other secured	4,735	4,869	—	—	9,604
Unsecured	50,584	3,424	(26)	26	54,008
Total other	55,319	8,293	(26)	26	63,612
Total	$ 583,997	$ 22,437	$ (1,762)	$ 75	$ 604,747

($ in thousands)	At or for the Nine Months Ended September 30, 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	$ 28,534	$ (1,728)	$ 44	$ 128,382
Home equity lines of credit	9,070	478	(381)	444	9,611
Single family construction	4,801	(379)	(679)	—	3,743
Total residential real estate	115,403	28,633	(2,788)	488	141,736
Income property					
Multifamily (5+ units)	111,384	11,084	—	—	122,468
Commercial real estate	55,413	14,284	—	—	69,697
Multifamily/commercial construction	23,884	10,556	—	—	34,440
Total income property	190,681	35,924	—	—	226,605
Business					
Capital call lines of credit	66,844	7,603	—	—	74,447
Tax-exempt	29,678	5,125	—	—	34,803
Other business	56,471	6,995	(7)	85	63,544
PPP	—	—	—	—	—
Total business	152,993	19,723	(7)	85	172,794
Other					
Stock secured	—	—	—	—	—
Other secured	3,399	6,205	—	—	9,604
Unsecured	31,953	22,820	(909)	144	54,008
Total other	35,352	29,025	(909)	144	63,612
Total	$ 494,429	$ 113,305	$ (3,704)	$ 717	$ 604,747

[1] Represents the ACL on loans after the transition adjustments from the adoption of CECL.

Allowance for Credit Losses on Unfunded Loan Commitments

To estimate the ACL on 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 and nine months ended September 30, 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 ACL on unfunded loan commitments increased during the quarter and nine months ended September 30, 2020 primarily due to commitment growth and an economic outlook reflecting the impact of COVID-19, and applying the CECL methodology. The following table presents the changes in the ACL on unfunded loan commitments:

($ in thousands)	At or for the Quarter Ended September 30, 2020	2019	At or for the Nine Months Ended September 30, 2020	2019
Balance at beginning of period [1]	$ 17,602	$ 13,000	$ 15,697	$ 13,217
Provision [2]	5,768	478	7,673	261
Charge-offs	—	—	—	—
Recoveries	—	—	—	—
Balance at end of period	$ 23,370	$ 13,478	$ 23,370	$ 13,478

[1] For the nine months ended September 30, 2020, the beginning balance represents the ACL on unfunded loan commitments after the transition adjustments from the adoption of CECL.

[2] The provision for unfunded loan commitments is included in the provision for credit losses for 2020 periods. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense.

Allowance for Credit Losses on Loans for the Quarter and Nine Months Ended September 30, 2019

The following discussion relates to the Bank's ACL on loans 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 TDR 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 on 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 tables present the changes in the ACL on loans, and related loan balances:

	At or for the Quarter Ended September 30, 2019 [1]					
	Allowance for Credit Losses on Loans					
($ in thousands)	Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period	Loan Balance
Residential real estate						
Single family (1-4 units)	$ 73,660	$ 3	$ (961)	$ 35	$ 72,737	$ 44,882,363
Home equity lines of credit	13,935	(549)	—	25	13,411	2,530,740
Single family construction	4,450	553	—	—	5,003	743,699
Total residential real estate	92,045	7	(961)	60	91,151	48,156,802
Income property						
Multifamily (5+ units)	88,977	10,592	—	—	99,569	11,672,916
Commercial real estate	55,615	6,419	—	—	62,034	7,415,677
Multifamily/commercial construction	14,141	777	—	—	14,918	1,583,968
Total income property	158,733	17,788	—	—	176,521	20,672,561
Business						
Capital call lines of credit	77,199	2,980	—	—	80,179	5,568,342
Tax-exempt	44,146	(11,079)	—	—	33,067	3,042,765
Other business	62,764	3,813	(3,329)	17	63,265	2,953,756
Total business	184,109	(4,286)	(3,329)	17	176,511	11,564,863
Other						
Stock secured	378	(378)	—	—	—	1,610,914
Other secured	6,486	837	—	—	7,323	1,293,084
Unsecured	31,344	2,743	(331)	203	33,959	3,006,586
Total other	38,208	3,202	(331)	203	41,282	5,910,584
Total	$ 473,095	$ 16,711	$ (4,621)	$ 280	$ 485,465	$ 86,304,810

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

($ in thousands)	At or for the Nine Months Ended September 30, 2019 [1] — Allowance for Credit Losses on Loans: Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period	Loan Balance
Residential real estate						
Single family (1-4 units)	$ 65,402	$ 8,110	$ (992)	$ 217	$ 72,737	$ 44,882,363
Home equity lines of credit	12,887	424	—	100	13,411	2,530,740
Single family construction	3,073	1,930	—	—	5,003	743,699
Total residential real estate	81,362	10,464	(992)	317	91,151	48,156,802
Income property						
Multifamily (5+ units)	79,640	19,929	—	—	99,569	11,672,916
Commercial real estate	54,604	7,430	—	—	62,034	7,415,677
Multifamily/commercial construction	15,484	(566)	—	—	14,918	1,583,968
Total income property	149,728	26,793	—	—	176,521	20,672,561
Business						
Capital call lines of credit	63,227	16,952	—	—	80,179	5,568,342
Tax-exempt	42,111	(9,044)	—	—	33,067	3,042,765
Other business	62,253	4,295	(3,329)	46	63,265	2,953,756
Total business	167,591	12,203	(3,329)	46	176,511	11,564,863
Other						
Stock secured	8,724	(8,724)	—	—	—	1,610,914
Other secured	8,301	251	(1,229)	—	7,323	1,293,084
Unsecured	23,342	11,124	(861)	354	33,959	3,006,586
Total other	40,367	2,651	(2,090)	354	41,282	5,910,584
Total	$ 439,048	$ 52,111	$ (6,411)	$ 717	$ 485,465	$ 86,304,810

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

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.

($ in thousands)	Quarter Ended September 30, 2019 [(1)] Average Recorded Investment	Quarter Ended September 30, 2019 [(1)] Interest Income Recognized	Nine Months Ended September 30, 2019 [(1)] Average Recorded Investment	Nine Months Ended September 30, 2019 [(1)] Interest Income Recognized
Single family (1-4 units)	$ 62,917	$ 207	$ 46,706	$ 551
Home equity lines of credit	13,121	20	11,958	116
Multifamily (5+ units)	10,345	118	11,347	468
Commercial real estate	5,967	87	6,272	225
Multifamily/commercial construction	70,419	—	28,168	—
Other business	7,562	39	8,763	108
Unsecured	52	6	271	19
Total	$ 170,383	$ 477	$ 113,485	$ 1,487

(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 TDRs 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 TDRs:

($ in thousands)	At September 30, 2020 Restructured - Nonaccrual	At September 30, 2020 Restructured - Accruing	At September 30, 2020 Total	At December 31, 2019 [(1)] Restructured - Nonaccrual	At December 31, 2019 [(1)] Restructured - Accruing	At December 31, 2019 [(1)] Total
Residential real estate						
Single family (1-4 units)	$ 21,948	$ 5,787	$ 27,735	$ 27,726	$ 6,441	$ 34,167
Home equity lines of credit	5,779	11	5,790	5,045	1,045	6,090
Total residential real estate	27,727	5,798	33,525	32,771	7,486	40,257
Income property						
Commercial real estate	—	4,710	4,710	—	4,712	4,712
Multifamily/commercial construction	57,881	—	57,881	68,856	—	68,856
Total income property	57,881	4,710	62,591	68,856	4,712	73,568
Business						
Other business	1,078	870	1,948	1,202	1,089	2,291
Total	$ 86,686	$ 11,378	$ 98,064	$ 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 and nine months ended September 30, 2020 and 2019, TDRs 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 TDRs during the periods indicated:

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019 (1)**	**2020**	**2019 (1)**
Residential real estate				
Single family (1-4 units)	$ 1,956	$ 23,670	$ 15,756	$ 24,949
Home equity lines of credit	875	2,983	4,794	3,163
Total residential real estate	2,831	26,653	20,550	28,112
Income property				
Multifamily/commercial construction	—	70,940	58,135	70,940
Business				
Other business	—	—	1,818	—
Total	$ 2,831	$ 97,593	$ 80,503	$ 99,052

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

For the quarter and nine months ended September 30, 2020, TDRs that were modified in the previous twelve months and for which there was a payment default totaled $61.9 million and $63.4 million, respectively. These restructured loans primarily include one lending relationship totaling $61.9 million, which consists of single family loans and non-owner occupied single family construction loans. The ACL on these loans is individually assessed at the loan level, and is based on the collateral dependent methodology. No loans defaulted during the quarter and nine months ended September 30, 2019 that were modified in the previous twelve months.

COVID-19 Loan Modifications

As discussed in Note 1, loan modifications to assist borrowers who are experiencing financial difficulties as a result of COVID-19 generally include deferring scheduled principal and/or interest payments for six months. For certain loans, the maturity of the loan may also be extended to allow for monthly payments to remain the same as they were pre-modification. The unpaid principal balance of such loan modifications (which are not classified as TDRs) totaled $3.9 billion, and were 3.7% of total loans as of September 30, 2020. In addition, as of September 30, 2020, deferred interest related to these modifications was $51.4 million.

Note 5. Mortgage Banking Activities

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:

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Total loans originated	$ 12,237,946	$ 10,963,392	$ 35,978,360	$ 26,739,524
Single family loans originated	$ 6,813,850	$ 4,872,598	$ 16,208,370	$ 11,129,819
Loans sold:				
Flow sales:				
Agency	$ 44,118	$ 25,214	$ 80,702	$ 51,426
Non-agency	—	11,932	31,870	43,266
Total flow sales	44,118	37,146	112,572	94,692
Bulk sales:				
Non-agency	235,732	—	673,401	152,119
Securitizations	—	—	300,116	—
Total loans sold	$ 279,850	$ 37,146	$ 1,086,089	$ 246,811
Gain on sale of loans:				
Amount [(1)]	$ 13,797	$ 122	$ 14,575	$ 466
Gain as a percentage of loans sold [(1)]	4.93 %	0.33 %	1.34 %	0.19 %

(1) The gain for the quarter and nine months ended September 30, 2020 included $10.3 million related to realized discounts on previously purchased loans when these loans were sold. Excluding these discounts of $10.3 million, the gain as a percentage of loans sold was 1.24% and 0.39% for the quarter and nine months ended September 30, 2020, respectively.

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:

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Loans serviced for others:				
Beginning balance	$ 8,315,632	$ 10,746,351	$ 9,297,972	$ 11,573,326
Loans sold	279,850	37,146	1,086,089	246,811
Repayments	(796,442)	(694,125)	(2,188,512)	(1,730,765)
Loans purchased	—	(9,762)	(396,509)	(9,762)
Ending balance	$ 7,799,040	$ 10,079,610	$ 7,799,040	$ 10,079,610
MSRs:				
Beginning balance	$ 31,721	$ 49,554	$ 41,720	$ 54,470
Additions due to new loans sold	1,479	341	7,547	2,153
Amortization expense	(3,322)	(3,540)	(10,478)	(10,268)
Provision for valuation allowance	(1,503)	(630)	(8,139)	(630)
Reductions due to purchases	—	(43)	(2,275)	(43)
Ending balance	$ 28,375	$ 45,682	$ 28,375	$ 45,682
Estimated fair value of MSRs	$ 32,628	$ 69,633	$ 32,628	$ 69,633
MSRs as a percent of loans serviced	0.36 %	0.45 %	0.36 %	0.45 %
Weighted average servicing fee collected for the period (annualized)	0.24 %	0.25 %	0.24 %	0.25 %
MSRs as a multiple of weighted average servicing fee	1.50 x	1.83 x	1.49 x	1.84 x

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

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Valuation allowance:				
Beginning balance	$ 6,736	$ —	$ 1,862	$ —
Provision	1,503	630	8,139	630
Write-down due to permanent impairment	(6,231)	—	(7,993)	—
Ending balance	$ 2,008	$ 630	$ 2,008	$ 630

The following table presents loan servicing fees:

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Contractually specified servicing fees	$ 4,969	$ 6,517	$ 15,968	$ 20,458
Late charges and ancillary fees, net of costs	$ (337)	$ (454)	$ (1,305)	$ (1,067)

During the nine months ended September 30, 2020, the Bank sold $300.1 million of originated single family loans through a securitization. These loans are included in the Bank's servicing portfolio, since the Bank performs servicing of the loans.

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)	September 30, 2020	December 31, 2019
Fair value of MSRs	$ 32,628	$ 57,891
Weighted average prepayment speed (CPR)	25.9 %	18.8 %
Impact on fair value of 10% adverse change	$ (2,749)	$ (3,343)
Impact on fair value of 20% adverse change	$ (5,194)	$ (6,399)
Weighted average discount rate	12.1 %	12.7 %
Impact on fair value of 10% adverse change	$ (748)	$ (1,899)
Impact on fair value of 20% adverse change	$ (1,463)	$ (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, carrying value and estimated future amortization expense of MSRs.

Note 6. Variable Interest Entities

The Bank's involvement with 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.

During the nine months ended September 30, 2020, the Bank sold $300.1 million of originated single family loans through a securitization in which the Bank was the sponsor. A securitization trust was created to purchase the loans and issue the securities in this securitization. The Bank has a variable interest in the securitization trust related to its retention of a 5% interest in the investment securities issued in the securitization. The retained investments, which had a carrying value of $14.6 million as of September 30, 2020, consist of senior and subordinated tranches and an interest-only strip, and are classified as either available-for-sale or held-to-maturity debt securities. Since the Bank is not the primary beneficiary of the VIE, it does not consolidate this interest.

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**
September 30, 2020			
Assets:			
Debt securities	$ 14,624	$ —	$ 14,624
Tax credit investments	1,099,713	—	1,099,713
Other investments	60,340	—	60,340
Total Assets	1,174,677	—	1,174,677
Liabilities:			
Reimbursement obligation	78	—	78
Unfunded commitments—tax credit investments	371,787	—	371,787
Unfunded commitments—other investments	18,403	—	18,403
Total Liabilities	390,268	—	390,268
Net Assets	$ 784,409	$ —	$ 784,409
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 both September 30, 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 September 30, 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 21 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)	September 30, 2020	December 31, 2019
Supplemental balance sheet information:		
Lease assets [(1)]	$ 928,899	$ 787,464
Lease liabilities [(2)]	$ 969,747	$ 811,541

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

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	2020	2019	2020	2019
Components of lease cost:				
Operating lease cost [(1)]	$ 32,660	$ 30,049	$ 97,280	$ 84,055
Variable lease cost [(1)]	30	97	270	475
Total lease cost	$ 32,690	$ 30,146	$ 97,550	$ 84,530

[(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:

	September 30, 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	$ (118,431)	$ 14,669	$ 133,100	$ (112,600)	$ 20,500
Core deposit intangibles	87,550	(87,550)	—	87,550	(87,297)	253
Trade name	42,900	—	42,900	42,900	—	42,900
Intangible assets	$ 263,550	$ (205,981)	57,569	$ 263,550	$ (199,897)	63,653
Goodwill			171,616			171,616
Total			$ 229,185			$ 235,269

Amortization of intangible assets (excluding MSRs) was $1.8 million and $6.1 million for the quarter and nine months ended September 30, 2020, respectively, and $2.8 million and $9.3 million for the quarter and nine months ended September 30, 2019, respectively.

The following table presents the Bank's MSRs:

	September 30, 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)]	$ 136,454	$ (106,071)	$ (2,008)	$ 28,375	$ 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 September 30, 2020	$ 24,604	$ 147,012	$ 171,616

The following table presents the estimated future amortization for amortizable intangible assets as of September 30, 2020. The projections of amortization expense are based on existing asset balances as of September 30, 2020. Future amortization expense may vary from these projections.

($ in thousands)	Customer relationship intangibles	MSRs
October 1 - December 31, 2020	$ 1,672	$ 2,897
2021	$ 5,527	$ 8,153
2022	$ 3,671	$ 4,851
2023	$ 2,235	$ 3,119
2024	$ 1,259	$ 2,339
2025	$ 305	$ 1,754

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 September 30,		Nine Months Ended September 30,	
($ in thousands)	September 30, 2020	December 31, 2019	2020	2019	2020	2019
Short-term borrowings:						
Federal funds purchased	$ —	$ 450,000	$ —	$ 4,900	$ 1,135	$ 9,066
FHLB advances	5,000	350,000	—	7,620	3,565	27,766
Total [(1)]	5,000	800,000	—	12,520	4,700	36,832
Long-term debt:						
FHLB advances	13,505,000	12,200,000	62,201	54,901	197,158	147,669
Senior notes [(2)]	995,626	497,719	6,032	3,350	16,839	14,818
Subordinated notes [(2)]	778,204	777,885	9,108	9,103	27,320	27,305
Total	15,278,830	13,475,604	77,341	67,354	241,317	189,792
Total borrowings	$ 15,283,830	$ 14,275,604	$ 77,341	$ 79,874	$ 246,017	$ 226,624

(1) At September 30, 2020, short-term borrowings, which consisted entirely of short-term FHLB advances, had a 0% interest rate under a limited COVID-19 relief program offered by the FHLB to support bank lending. At December 31, 2019, the weighted average interest rate of our short-term borrowings, which consisted of federal funds purchased and short-term FHLB advances, was 1.27%.

(2) 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 September 30, 2020, the Bank had $5.0 million in short-term FHLB advances. At September 30, 2020, all of the long-term FHLB advances were fixed-rate for a specific term. At September 30, 2020, the contractual maturities and weighted average contractual rates of long-term FHLB advances were as follows:

	September 30, 2020	
($ in thousands)	**Amount**	**Rate**
FHLB advances maturing in:		
October 1 - December 31, 2020	$ 100,000	2.56 %
2021	8,305,000	1.72 %
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	$ 13,505,000	1.60 %

In connection with outstanding FHLB advances, the Bank owned FHLB stock of $419.5 million and $367.9 million at September 30, 2020 and December 31, 2019, respectively. At September 30, 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 September 30, 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.

	September 30, 2020			
($ in thousands)	**Carrying Value (1)**	**Rate**	**Optional Redemption Date (2)**	**Maturity Date (3)**
Senior notes:				
Fixed-rate, issued June 2017	$ 498,407	2.500 %	May 6, 2022	June 6, 2022
Fixed-to-floating rate, issued February 2020	$ 497,219	1.912% (4)	February 12, 2023	February 12, 2024
Subordinated notes:				
Fixed-rate, issued August 2016	$ 388,218	4.375 %	February 1, 2046	August 1, 2046
Fixed-rate, issued February 2017	$ 389,986	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 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 September 30, 2020 was $30.5 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.

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:

	September 30, 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	$ 4,783,284	$ 33,048	$ 28,508	$ 4,360,407	$ 40,789	$ 27,040
Interest rate contracts with borrowers	$ 200,869	501	—	$ 10,061	6	5
Forward loan sale commitments	$ 234,369	—	501	$ 33,414	5	6
Total		$ 33,549	$ 29,009		$ 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
September 30, 2020								
Derivative assets:								
Foreign exchange contracts	$ 33,048	$ 23,556	$ 9,492	$ —	$ 9,492	$ 9,492	$ —	$ —
Derivative liabilities:								
Foreign exchange contracts	$ 28,508	$ 6,064	$ 22,444	$ —	$ 22,444	$ 9,492	$ 12,440	$ 512
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 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, mutual funds, marketable equity securities 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 adjustments of individual assets or application of the lower-of-cost-or-market accounting. Nonrecurring fair value adjustments of loans are generally 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 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
September 30, 2020				
Assets:				
Debt securities available-for-sale:				
Agency residential MBS	$ —	$ 817,179	$ —	$ 817,179
Other residential MBS	—	23,026	—	23,026
Agency commercial MBS	—	823,524	—	823,524
Securities of U.S. states and political subdivisions—taxable	—	—	47,473	47,473
Equity securities (fair value):				
Mutual funds and marketable equity securities	20,478	—	—	20,478
Derivative assets	—	33,549	—	33,549
Total	$ 20,478	$ 1,697,278	$ 47,473	$ 1,765,229
Liabilities:				
Derivative liabilities	$ —	$ 29,009	$ —	$ 29,009
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 and nine months ended September 30, 2020 and 2019.

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

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	2020	2019	2020	2019
Available-for-sale debt securities of U.S. states and political subdivisions—taxable:				
Balance at beginning of period	$ 47,455	$ 47,448	$ 47,450	$ 47,448
Unrealized gains (losses) included in other comprehensive income (loss)	16	(1)	14	(3)
Accretion included in interest income	2	2	9	4
Balance at end of period	$ 47,473	$ 47,449	$ 47,473	$ 47,449

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
September 30, 2020			
Available-for-sale debt securities of U.S. states and political subdivisions—taxable	$ 47,473	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 generally based on the fair value of the underlying collateral, primarily real estate, adjusted for certain factors such as estimated costs to sell and current market conditions.

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 September 30, 2020 and December 31, 2019:

($ in thousands)	Level 1	Level 2	Level 3	Total
September 30, 2020				
Loans	$ —	$ —	$ 14,638	$ 14,638
MSRs	—	—	20,816	20,816
Total	$ —	$ —	$ 35,454	$ 35,454
December 31, 2019				
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 losses related to nonrecurring fair value measurements. The losses relate to assets held on the balance sheet at each respective period end.

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Loans	$ (1,226)	$ (961)	$ (1,602)	$ (992)
MSRs	(1,503)	(630)	(8,139)	(630)
Total	$ (2,729)	$ (1,591)	$ (9,741)	$ (1,622)

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:

	September 30, 2020				
		Fair Value			
($ in thousands)	**Carrying Amount**	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:					
Cash and cash equivalents	$ 3,691,149	$ 3,691,149	$ 3,691,149	$ —	$ —
Debt securities held-to-maturity, net: (1)					
U.S. Government-sponsored agency securities	50,000	49,324	—	49,324	—
Agency residential MBS	1,695,377	1,738,595	—	1,738,595	—
Other residential MBS	13,983	14,137	—	14,137	—
Agency commercial MBS	2,760,528	2,936,331	—	2,936,331	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	11,554,074	12,471,891	—	12,400,946	70,945
Tax-exempt nonprofit debentures	114,891	115,717	—	—	115,717
Taxable municipal securities	710,786	770,744	—	770,744	—
Corporate debt securities	24,067	26,527	—	26,527	—
Loans, net: (1)					
Real estate secured mortgages	82,644,377	81,272,263	—	56,074,777	25,197,486
Other loans	21,512,527	20,351,926	—	—	20,351,926
Loans held for sale	33,655	34,259	—	34,259	—
Other assets:					
MSRs	28,375	32,628	—	—	32,628
FHLB stock	419,486	419,486	—	—	419,486
Liabilities:					
Deposits:					
CDs	$ 9,495,453	$ 9,539,949	$ —	$ —	$ 9,539,949
Borrowings:					
Long-term FHLB advances	13,505,000	13,724,365	—	13,724,365	—
Senior notes	995,626	1,030,480	—	1,030,480	—
Subordinated notes	778,204	981,688	—	981,688	—

(1) Carrying amount is presented net of ACL.

	December 31, 2019				
		Fair Value			
($ in thousands)	**Carrying Amount**	**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 subdivisions:					
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
Other assets:					
MSRs	41,720	57,891	—	—	57,891
FHLB stock	367,943	367,943	—	—	367,943
Liabilities:					
Deposits:					
CDs	$ 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 ACL.

Note 12. Preferred Stock

At September 30, 2020, the Bank was authorized to issue 25,000,000 shares of preferred stock, par value $0.01 per share, of which 1,645,000 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)	September 30, 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
4.125% Noncumulative Perpetual Series K—500,000 shares authorized, issued and outstanding	500,000	—
Total	$ 1,645,000	$ 1,145,000

On September 16, 2020, the 4.125% Noncumulative Perpetual Series K Preferred Stock ("Series K Preferred Stock") was issued. Net proceeds, after underwriting discounts and expenses, were approximately $492.0 million. The public offering consisted of 20,000,000 depositary shares, each representing a 1/40th interest in a share of the Series K Preferred Stock, at a public offering price of $25.00 per depositary share. The Series K Preferred Stock is redeemable at the option of the Bank, subject to all applicable regulatory approvals, on or after October 30, 2025.

Refer to Note 19, "Subsequent Events," for information regarding the Bank's redemption of all of its outstanding 5.70% Noncumulative Perpetual Series F Preferred Stock on October 9, 2020.

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") and Series K Preferred Stock, are paid each March 30, June 30, September 30 and December 30. Dividends on the Series J Preferred Stock and Series K Preferred Stock are paid each January 30, April 30, July 30 and October 30, and the Series K Preferred Stock dividend payments commenced on October 30, 2020. The following table presents dividends paid on preferred stock:

	Quarter Ended September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
(in thousands, except per share amounts)	Total	Per Share	Total	Per Share	Total	Per Share	Total	Per Share
5.50% Noncumulative Perpetual Series D	$ —	$ —	$ 2,612	$ 13.75	$ —	$ —	$ 7,837	$ 41.25
5.70% Noncumulative Perpetual Series F	1,425	$ 14.25	1,425	$ 14.25	4,275	$ 42.75	4,275	$ 42.75
5.50% Noncumulative Perpetual Series G	2,063	$ 13.75	2,063	$ 13.75	6,188	$ 41.25	6,188	$ 41.25
5.125% Noncumulative Perpetual Series H	2,562	$ 12.81	2,562	$ 12.81	7,687	$ 38.44	7,687	$ 38.44
5.50% Noncumulative Perpetual Series I	4,125	$ 13.75	4,125	$ 13.75	12,375	$ 41.25	12,375	$ 41.25
4.70% Noncumulative Perpetual Series J	4,641	$ 11.75	—	$ —	12,128	$ 30.70	—	$ —
Total	$ 14,816		$ 12,787		$ 42,653		$ 38,362	

Note 13. Common Stock and Stock Plans

Common Stock

At September 30, 2020, the Bank was authorized to issue 400,000,000 shares of common stock, par value $0.01 per share. At September 30, 2020, the Bank had 172,187,825 shares issued and outstanding. During the nine months ended September 30, 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 nine months ended September 30, 2020, a total of 197,595 shares were sold to employees, and the compensation expense for the Purchase Plan was $3.0 million.

First Republic Bank 2017 Omnibus Award Plan

In May 2020, the Bank amended the 2017 Omnibus Award Plan to, among other things, increase the number of shares reserved for issuance by an additional 4,000,000 shares. Stock awards outstanding were not affected by the amendment, and the terms of the award plan prior to the amendment 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, RSUs or PSUs to its employees, officers and directors. Upon termination of service, unvested awards are generally forfeited. At September 30, 2020, the Bank had 3,257,492 shares reserved for future stock award grants.

Stock Options

At September 30, 2020, the Bank had stock options outstanding of 17,850. 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 September 30, 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	(301,903)	$15.67		
Options outstanding as of September 30, 2020	17,850	$28.78	0.8 years	$1,433

The intrinsic value of all options exercised was $28.0 million for the nine months ended September 30, 2020.

Restricted Stock Units

The Bank has granted 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 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	1,187,491	$107.84		249,299	$110.64	
Vested	(629,894)	$88.21		(153,709)	$85.68	
Canceled or forfeited	(19,983)	$106.55		(696)	$111.12	
Nonvested awards as of September 30, 2020	3,133,678	$107.03	3.6 years	461,903	$105.86	2.0 years

The total fair value of Performance RSUs that vested in the nine months ended September 30, 2020 was $70.1 million. The total fair value of Time RSUs that vested in the nine months ended September 30, 2020 was $15.5 million. No cash consideration was received in connection with the vesting of these awards.

Performance Share Units

The Bank has granted 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, 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, 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	309,250	$105.69	
Vested	(270,710)	$88.86	
Canceled or forfeited	—	—	
Nonvested awards as of September 30, 2020	1,027,282	$104.12	2.2 years

The total fair value of PSUs that vested in the nine months ended September 30, 2020 was $29.6 million. No cash consideration was received in connection with the vesting of these awards.

Compensation Expense

RSUs, PSUs and 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 September 30, 2020.

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

	Quarter Ended September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
($ in thousands)	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit
RSUs	$ 25,058	$ 7,104	$ 18,657	$ 5,377	$ 76,257	$ 21,742	$ 55,997	$ 16,185
PSUs	8,543	1,484	5,925	1,223	26,206	4,825	18,086	3,778
RSAs	—	—	139	41	—	—	417	124
Total	$ 33,601	$ 8,588	$ 24,721	$ 6,641	$ 102,463	$ 26,567	$ 74,500	$ 20,087

	September 30, 2020	
($ in thousands)	Unrecognized Expense	Weighted Average Expected Recognition Period
RSUs	$ 327,068	3.5 years
PSUs	82,226	2.3 years
Total	$ 409,294	

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 September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
($ in thousands)	Number of Awards Exercised or Vested	Related Excess Tax Benefit	Number of Awards Exercised or Vested	Related Excess Tax Benefit (Deficiency)	Number of Awards Exercised or Vested	Related Excess Tax Benefit	Number of Awards Exercised or Vested	Related Excess Tax Benefit
Stock options	18,730	$ 527	432,822	$ 9,579	301,903	$ 8,006	1,304,375	$ 30,016
RSUs	52,095	274	44,719	(50)	783,603	5,487	903,343	4,614
PSUs	—	—	—	—	270,710	1,828	270,717	1,290
RSAs	—	—	4,375	84	—	—	13,125	260
Total	70,825	$ 801	481,916	$ 9,613	1,356,216	$ 15,321	2,491,560	$ 36,180

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	Debt Securities Available-For-Sale	Debt Securities Transferred from Available-For-Sale to Held-to-Maturity	Total
	Quarter Ended September 30, 2020			Nine Months Ended September 30, 2020		
Beginning balance	**$ 26,696**	**$ 495**	**$ 27,191**	**$ 4,293**	**$ 838**	**$ 5,131**
Net unrealized gain (loss) on securities available- for-sale	(4,082)	—	(4,082)	27,716	—	27,716
Related tax effect	1,216	—	1,216	(8,260)	—	(8,260)
Reclassification of loss on debt securities available-for-sale to net income (1)	—	—	—	114	—	114
Related tax effect (2)	—	—	—	(33)	—	(33)
Amortization of unrealized gain on debt securities transferred from available for-sale to held-to-maturity (3)	—	(237)	(237)	—	(725)	(725)
Related tax effect (2)	—	71	71	—	216	216
Other comprehensive income (loss)	(2,866)	(166)	(3,032)	19,537	(509)	19,028
Ending balance	**$ 23,830**	**$ 329**	**$ 24,159**	**$ 23,830**	**$ 329**	**$ 24,159**
	Quarter Ended September 30, 2019			Nine Months Ended September 30, 2019		
Beginning balance	**$ (1,155)**	**$ 1,176**	**$ 21**	**$ (20,945)**	**$ 1,562**	**$ (19,383)**
Net unrealized gain on securities available-for-sale	13,325	—	13,325	39,494	—	39,494
Related tax effect	(3,971)	—	(3,971)	(11,769)	—	(11,769)
Reclassification of loss on debt securities available-for-sale to net income (1)	890	—	890	2,912	—	2,912
Related tax effect (2)	(265)	—	(265)	(868)	—	(868)
Amortization of unrealized gain on debt securities transferred from available for-sale to held-to-maturity (3)	—	(242)	(242)	—	(792)	(792)
Related tax effect (2)	—	72	72	—	236	236
Other comprehensive income (loss)	9,979	(170)	9,809	29,769	(556)	29,213
Ending balance	**$ 8,824**	**$ 1,006**	**$ 9,830**	**$ 8,824**	**$ 1,006**	**$ 9,830**

(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 rates for the quarter and nine months ended September 30, 2020 were 19.6% and 19.5%, respectively. The Bank's effective tax rates for the quarter and nine months ended September 30, 2019 were 18.0% and 17.0%, respectively. The following table presents the reconciliation between the effective tax rate and the federal statutory rate:

	Quarter Ended September 30,		Nine Months Ended September 30,	
Effective Tax Rate	**2020**	**2019**	**2020**	**2019**
Statutory rate	21.0 %	21.0 %	21.0 %	21.0 %
State taxes, net of federal benefits	7.7	7.9	8.1	7.9
Tax-exempt income	(6.3)	(6.3)	(6.9)	(6.5)
Investments in life insurance	(1.2)	(0.9)	(0.8)	(0.8)
Tax credits	(12.0)	(13.9)	(13.9)	(14.6)
Tax credit investment amortization	10.8	12.2	12.5	12.9
Excess tax benefits—stock options	(0.1)	(3.3)	(0.8)	(3.6)
Excess tax benefits—other stock awards	(0.1)	(0.1)	(0.8)	(0.8)
FDIC assessments	0.6	0.7	0.7	0.7
Tax refund from an amended tax return	(1.3)	—	(0.5)	—
Other, net	0.5	0.7	0.9	0.8
Effective tax rate	19.6 %	18.0 %	19.5 %	17.0 %

Note 16. Earnings Per Common Share

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

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands, except per share amounts)	**2020**	**2019**	**2020**	**2019**
Basic EPS:				
Net income	$ 293,137	$ 234,844	$ 768,591	$ 683,999
Less: Dividends on preferred stock	14,816	12,787	42,653	38,362
Net income available to common shareholders	$ 278,321	$ 222,057	$ 725,938	$ 645,637
Weighted average common shares outstanding	172,142	168,272	171,537	167,694
Net income per common share—basic	$ 1.62	$ 1.32	$ 4.23	$ 3.85
Diluted EPS:				
Net income available to common shareholders	$ 278,321	$ 222,057	$ 725,938	$ 645,637
Weighted average shares:				
Common shares outstanding	172,142	168,272	171,537	167,694
Dilutive effect of stock options	18	612	101	849
Dilutive effect of RSAs, RSUs and PSUs	772	462	876	906
Weighted average diluted common shares outstanding	172,932	169,346	172,514	169,449
Net income per common share—diluted	$ 1.61	$ 1.31	$ 4.21	$ 3.81

Stock options, RSAs, RSUs and PSUs that are anti-dilutive are not included in the calculation of diluted EPS. The following table presents the weighted average shares of outstanding stock awards that were anti-dilutive for the periods indicated:

	Quarter Ended September 30,		Nine Months Ended September 30,	
(in thousands)	**2020**	**2019**	**2020**	**2019**
RSUs and PSUs	15	767	76	4

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 September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Noninterest income:				
Revenue from contracts with customers:				
Investment management fees	$ 96,638	$ 83,582	$ 281,017	$ 262,226
Brokerage and investment fees	9,954	12,040	36,957	26,587
Insurance fees	2,216	2,712	6,086	8,522
Trust fees	4,543	4,105	14,118	12,221
Deposit fees	5,753	6,563	17,598	19,462
Other income	1,269	1,082	4,080	3,299
Total revenue from contracts with customers	120,373	110,084	359,856	332,317
Other sources of noninterest income	50,610	32,123	106,740	87,558
Total noninterest income	$ 170,983	$ 142,207	$ 466,596	$ 419,875

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 AUM, AUA 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 $14.7 million and $21.8 million at September 30, 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 September 30, 2020				
Net interest income	$ 796,989	$ 33,291	$ —	$ 830,280
Provision for credit losses	28,538	—	—	28,538
Noninterest income from contracts with customers [1]	5,752	124,954	(10,333)	120,373
Other noninterest income	37,318	13,292	—	50,610
Noninterest income	43,070	138,246	(10,333)	170,983
Amortization of intangibles	—	1,790	—	1,790
Other noninterest expense	491,949	124,804	(10,333)	606,420
Noninterest expense	491,949	126,594	(10,333)	608,210
Income before provision for income taxes	319,572	44,943	—	364,515
Provision for income taxes	58,324	13,054	—	71,378
Net income	$ 261,248	$ 31,889	$ —	$ 293,137
Goodwill	$ 24,604	$ 147,012	$ —	$ 171,616
Total Assets	$ 132,674,587	$ 961,092	$ (409,908)	$ 133,225,771
At or for the Quarter Ended September 30, 2019				
Net interest income	$ 673,801	$ 21,184	$ —	$ 694,985
Provision for credit losses	16,711	—	—	16,711
Noninterest income from contracts with customers [1]	6,949	111,626	(8,491)	110,084
Other noninterest income	20,283	11,840	—	32,123
Noninterest income	27,232	123,466	(8,491)	142,207
Amortization of intangibles	398	2,434	—	2,832
Other noninterest expense	435,460	104,149	(8,491)	531,118
Noninterest expense	435,858	106,583	(8,491)	533,950
Income before provision for income taxes	248,464	38,067	—	286,531
Provision for income taxes	40,510	11,177	—	51,687
Net income	$ 207,954	$ 26,890	$ —	$ 234,844
Goodwill	$ 51,435	$ 147,012	$ —	$ 198,447
Total Assets	$ 110,489,310	$ 780,547	$ (241,122)	$ 111,028,735

[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 Nine Months Ended September 30, 2020				
Net interest income	$ 2,285,329	$ 84,495	$ —	$ 2,369,824
Provision for credit losses	122,025	—	—	122,025
Noninterest income from contracts with customers [1]	18,511	371,371	(30,026)	359,856
Other noninterest income	70,253	36,487	—	106,740
Noninterest income	88,764	407,858	(30,026)	466,596
Amortization of intangibles	253	5,831	—	6,084
Other noninterest expense	1,400,383	383,244	(30,026)	1,753,601
Noninterest expense	1,400,636	389,075	(30,026)	1,759,685
Income before provision for income taxes	851,432	103,278	—	954,710
Provision for income taxes	158,763	27,356	—	186,119
Net income	$ 692,669	$ 75,922	$ —	$ 768,591
Goodwill	$ 24,604	$ 147,012	$ —	$ 171,616
Total Assets	$ 132,674,587	$ 961,092	$ (409,908)	$ 133,225,771
At or for the Nine Months Ended September 30, 2019				
Net interest income	$ 1,979,184	$ 64,865	$ —	$ 2,044,049
Provision for credit losses	52,111	—	—	52,111
Noninterest income from contracts with customers [1]	20,511	336,766	(24,960)	332,317
Other noninterest income	55,914	31,644	—	87,558
Noninterest income	76,425	368,410	(24,960)	419,875
Amortization of intangibles	1,519	7,797	—	9,316
Other noninterest expense	1,274,663	328,597	(24,960)	1,578,300
Noninterest expense	1,276,182	336,394	(24,960)	1,587,616
Income before provision for income taxes	727,316	96,881	—	824,197
Provision for income taxes	113,107	27,091	—	140,198
Net income	$ 614,209	$ 69,790	$ —	$ 683,999
Goodwill	$ 51,435	$ 147,012	$ —	$ 198,447
Total Assets	$ 110,489,310	$ 780,547	$ (241,122)	$ 111,028,735

[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 September 30, 2020.

On October 9, 2020 (the "Series F Redemption Date"), we redeemed all outstanding depositary shares, each representing a 1/40th interest in a share of the Bank's 5.70% Noncumulative Perpetual Series F Preferred Stock ("Series F Preferred Stock"). In total, 4,000,000 depositary shares were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $100.0 million plus all accrued and unpaid dividends as of the Series F Redemption Date. As of the Series F Redemption Date, the Series F Preferred Stock was deemed no longer outstanding, and no further dividends will be declared on the Series F Preferred Stock. This redemption reduced the Bank's Tier 1 capital by $100.0 million.

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 and duration of COVID-19;
- 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 LIBOR and 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 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 EGRRCPA;
- Our ability to avoid litigation and its associated costs and liabilities;
- Future 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 September 30, 2020	At or for the Quarter Ended September 30, 2019	At or for the Nine Months Ended September 30, 2020	At or for the Nine Months Ended September 30, 2019
Selected Financial Data:				
Interest income	$ 961,976	$ 909,776	$ 2,861,521	$ 2,642,525
Interest expense	131,696	214,791	491,697	598,476
Net interest income	830,280	694,985	2,369,824	2,044,049
Provision for credit losses [(1)]	28,538	16,711	122,025	52,111
Net interest income after provision for credit losses	801,742	678,274	2,247,799	1,991,938
Noninterest income	170,983	142,207	466,596	419,875
Noninterest expense	608,210	533,950	1,759,685	1,587,616
Net income	293,137	234,844	768,591	683,999
Dividends on preferred stock	14,816	12,787	42,653	38,362
Net income available to common shareholders	$ 278,321	$ 222,057	$ 725,938	$ 645,637
Selected Ratios:				
Basic EPS	$ 1.62	$ 1.32	$ 4.23	$ 3.85
Diluted EPS	$ 1.61	$ 1.31	$ 4.21	$ 3.81
Net income to average assets [(2)]	0.88 %	0.87 %	0.82 %	0.89 %
Net income available to common shareholders to average common equity [(2)]	11.56 %	10.50 %	10.40 %	10.49 %
Net income available to common shareholders to average tangible common equity [(2)]	11.84 %	10.84 %	10.67 %	10.85 %
Average total equity to average total assets	8.19 %	8.72 %	8.35 %	8.92 %
Dividends per common share	$ 0.20	$ 0.19	$ 0.59	$ 0.56
Dividend payout ratio	12.4 %	14.5 %	14.0 %	14.7 %
Book value per common share	$ 56.33	$ 50.41	$ 56.33	$ 50.41
Tangible book value per common share	$ 55.00	$ 48.84	$ 55.00	$ 48.84
Net interest margin [(2)]	2.71 %	2.80 %	2.72 %	2.87 %
Efficiency ratio [(3), (4)]	60.7 %	63.8 %	62.0 %	64.4 %
Selected Asset Quality Ratios:				
Nonperforming assets to total assets	0.12 %	0.12 %	0.12 %	0.12 %
Allowance for loan credit losses to total loans	0.58 %	0.56 %	0.58 %	0.56 %
Allowance for loan credit losses to nonperforming loans	368.2 %	354.5 %	368.2 %	354.5 %
Net loan charge-offs to average total loans [(2)]	0.01 %	0.02 %	0.00 %	0.01 %
Capital Ratios:				
Tier 1 leverage ratio	8.38 %	8.50 %	8.38 %	8.50 %
CET1 ratio	9.78 %	9.91 %	9.78 %	9.91 %
Tier 1 risk-based capital ratio	11.50 %	11.05 %	11.50 %	11.05 %
Total risk-based capital ratio	12.94 %	12.61 %	12.94 %	12.61 %

[(1)] Beginning January 1, 2020, the provision for unfunded loan commitments is included in the provision for credit losses. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense.

[(2)] Ratios are annualized.

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

[(4)] The efficiency ratio reflects the impact of including the provision for unfunded loan commitments in the provision for credit losses for the quarter and nine months ended September 30, 2020. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense.

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 and foreign exchange; (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 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 ACL 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 ACL on loans, which reflects the adoption of ASC 326, "Financial Instruments—Credit Losses."

Allowance for Credit Losses on Loans

Effective upon the adoption of ASC 326, the Bank estimates its ACL using quantitative 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.

Quantitative PD/LGD models, which are used for residential real estate, income property, tax-exempt business, and other business loans, estimate the likelihood that a loan will default and measure the loss the Bank would incur if that loan defaults. Quantitative loss rate models, which are used for other secured and certain unsecured loans, use the relationship between historical losses and macroeconomic factors to determine an expected loss rate. Estimated loss amounts are based on the macroeconomic forecast scenario, prepayment (or repayment) projections and, in most cases, 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. The models also account for prepayments during the 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 commitment size and expected line utilization. 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 the 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 TDRs, 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 ACL, 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 nine months ended September 30, 2020, refer to Note 1, "Summary of Significant Accounting Policies—Accounting Standards Adopted in 2020."

The following ASU has been issued by the FASB, but was not yet effective as of September 30, 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 allow 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 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 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 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 2019 final rule became effective on January 1, 2020 and has a compliance date of January 1, 2021. 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 June 2020, the agencies adopted an additional final rule that, among other changes, establishes additional exclusions from the covered fund provisions of the Volcker Rule, revises the eligibility criteria for certain existing exclusions, and modifies provisions that limit certain types of transactions between a banking entity and its sponsored or advised covered funds. The 2020 final rule became effective October 1, 2020 and does not provide any transition period for compliance. We do not believe the amendments to the regulations that implement the Volcker Rule 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.

COVID-19

COVID-19 has created significant volatility in the financial markets and impacted global and local economies. Various measures, including legislative and regulatory actions, have been taken to stabilize markets, promote economic growth, and assist those negatively impacted by the pandemic.

Our response to the pandemic includes: company-wide remote working arrangements, modified openings and hours in our preferred banking offices, social distancing and other measures to ensure the safety of our colleagues and clients; and community support through corporate contributions for those in need. In addition, we provided loan modifications to borrowers experiencing financial difficulties as a result of COVID-19. We have also provided loans to small businesses under the PPP. See "—Balance Sheet Analysis—Asset Quality—COVID-19 Loan Modifications" and "—Balance Sheet Analysis—Loan Portfolio—Business—PPP Loans" for additional information.

The Bank's provision for credit losses for the quarter and nine months ended September 30, 2020 also incorporates an economic outlook reflecting the impact of COVID-19. See "—Results of Operations—Quarter and Nine Months Ended September 30, 2020, Compared to Quarter and Nine Months Ended September 30, 2019—Provision for Credit Losses" for additional discussion of the Bank's provision for credit losses.

See "Item 1A. Risk Factors" for additional discussion of risks related to COVID-19.

Financial Highlights

Assets

- At September 30, 2020, total assets were $133.2 billion, a 15% increase compared to $116.3 billion at December 31, 2019 and a 20% increase compared to $111.0 billion at September 30, 2019. Asset growth was driven primarily by loan growth.

Investments

- At September 30, 2020, total investment securities were $18.7 billion, a slight increase compared to $18.4 billion at December 31, 2019 and a 7% increase compared to $17.4 billion at September 30, 2019. Total investment securities represented 14% of total assets at September 30, 2020, compared to 16% at both December 31, 2019 and September 30, 2019. The increase in investment securities for the year was primarily due to purchases of securities considered HQLA, including certain municipal securities, agency commercial MBS, U.S. Government-sponsored agency securities, and agency residential 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 $17.1 billion at September 30, 2020, compared to $14.5 billion at December 31, 2019 and $13.6 billion at September 30, 2019. At September 30, 2020, HQLA represented 12.9% of average total assets for the third quarter of 2020. Effective in March 2020, the Federal Reserve eliminated the reserve requirement, which has resulted in an increase in HQLA eligible cash.

Loans

- At September 30, 2020, loans, excluding loans held for sale, were $104.8 billion, a 15% increase compared to $90.8 billion at December 31, 2019 and a 21% increase compared to $86.3 billion at September 30, 2019. Loans increased as a result of growth primarily in single family and multifamily loans, as well as PPP loans. Beginning in April 2020, the Bank became a lender under the PPP. PPP loans totaled $2.1 billion as of September 30, 2020. For additional discussion regarding our loan portfolio, see "—Balance Sheet Analysis—Loan Portfolio."

- Average loan balances were $102.4 billion for the third quarter of 2020, compared to $84.0 billion for the third quarter of 2019, an increase of 22%, and were $97.9 billion for the nine months ended September 30, 2020, compared to $80.1 billion for the nine months ended September 30, 2019, an increase of 22%.

- Our single family mortgage loans, including single family mortgage loans held for sale and HELOCs, were $59.1 billion and represented 56% of total loans at September 30, 2020, compared to $50.5 billion, or 56% of total loans at December 31, 2019 and $47.4 billion, or 55% of total loans at September 30, 2019.

- Loan origination volume was $12.2 billion for the third quarter of 2020, compared to $11.0 billion for the third quarter of 2019, an increase of 12%, and was $36.0 billion for the nine months ended September 30, 2020, compared to $26.7 billion for the nine months ended September 30, 2019, an increase of 35%. The increase for the quarter was primarily due to an increase in single family lending. The increase for the nine months was primarily due to increases in single family and business lending. In addition, loan originations included $2.0 billion of PPP loans for the nine months ended September 30, 2020.

Deposits

- Total deposits were $104.4 billion at September 30, 2020, an increase of 16% compared to $90.1 billion at December 31, 2019, and an increase of 22% compared to $85.7 billion at September 30, 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. See "—Balance Sheet Analysis—Deposit Gathering" for additional information.

- Average deposit balances were $102.4 billion for the third quarter of 2020, an increase of 24% from $82.4 billion for the third quarter of 2019, and were $96.3 billion for the nine months ended September 30, 2020, an increase of 22% from $79.2 billion for the nine months ended September 30, 2019.

- At September 30, 2020, checking deposit balances were $67.6 billion, or 65% of total deposits, compared to $52.8 billion, or 59% of total deposits at December 31, 2019 and $50.2 billion, or 59% of total deposits at September 30, 2019.

- The following table presents percentages of business and consumer deposits:

Business and Consumer Deposits as a % of Total Deposits	**September 30, 2020**	**December 31, 2019**	**September 30, 2019**
Business deposits	58 %	56 %	58 %
Consumer deposits	42	44	42
Total	100 %	100 %	100 %

Capital, Book Value per Common Share and Tangible Book Value per Common Share

- Our Tier 1 leverage ratio at September 30, 2020 was 8.38%. We continue to exceed regulatory guidelines for well-capitalized institutions. See "—Capital Resources" for further discussion of capital ratios and our capital requirements.

- Book value per common share was $56.33 at September 30, 2020, a 9% increase from December 31, 2019 and a 12% increase during the last twelve months.

- Tangible book value per common share was $55.00 at September 30, 2020, a 9% increase from December 31, 2019 and a 13% increase during the last twelve months.

Capital Markets Activity

- Our capital markets activity for the first nine months 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 expenses, were $290.6 million.

    - In February 2020, an underwritten public offering of $500.0 million of 1.912% unsecured senior fixed-to-floating rate notes. Net proceeds, after underwriting discounts and expenses, were $496.5 million. The senior notes will mature on February 12, 2024 unless previously redeemed, and are redeemable on February 12, 2023.

    - In September 2020, a public offering of 20,000,000 depositary shares, each representing a 1/40th interest in a share of our 4.125% Noncumulative Perpetual Series K Preferred Stock ("Series K Preferred Stock"), at a public offering price of $25.00 per depositary share. We issued 500,000 shares of the Series K Preferred Stock in connection with the offering, each with a liquidation preference of $1,000. Net proceeds, after underwriting discounts and expenses, were approximately $492.0 million.

- In addition, on October 9, 2020, we redeemed all outstanding shares of our 5.70% Noncumulative Perpetual Series F Preferred Stock at an aggregate amount of $100.0 million plus all accrued and unpaid dividends as of the redemption date.

Dividends

- Cash dividends paid in the third quarter of 2020 were $0.20 per share of common stock to shareholders of record as of July 30, 2020, compared to $0.19 in the third quarter of 2019.

- On October 13, 2020, we declared a cash dividend for the third quarter of $0.20 per share, which is payable on November 12, 2020 to shareholders of record as of October 29, 2020. Any future payment of dividends will be subject to ongoing regulatory oversight and board approval.

Wealth Management Assets

- Wealth management AUM and AUA were $168.2 billion at September 30, 2020, compared to $151.0 billion at December 31, 2019, an increase of 11%, and $140.2 billion at September 30, 2019, an increase of 20%. The increases in AUM and AUA were due to net client inflow and market appreciation. See "—Business Segments" for additional information.

Effective Tax Rate

- The Bank's effective tax rate was 19.6% and 19.5% for the quarter and nine months ended September 30, 2020, respectively, compared to 18.0% and 17.0%, respectively, for the quarter and nine months ended September 30, 2019. See "—Results of Operations—Quarter and Nine Months Ended September 30, 2020, Compared to Quarter and Nine Months Ended September 30, 2019—Provision for Income Taxes" for additional information.

Results of Operations—Quarter and Nine Months Ended September 30, 2020, Compared to Quarter and Nine Months Ended September 30, 2019

Overview

Net income for the quarter and nine months ended September 30, 2020 was $293.1 million and $768.6 million, compared to $234.8 million and $684.0 million for the quarter and nine months ended September 30, 2019, respectively, an increase of 25% for the quarter and an increase of 12% for the nine months. The increases were primarily due to higher net interest income and noninterest income. Diluted EPS for the quarter and nine months ended September 30, 2020 were $1.61 and $4.21, compared to $1.31 and $3.81 for the quarter and nine months ended September 30, 2019, respectively, an increase of 23% for the quarter and an increase of 10% for the nine months.

Net income for the Commercial Banking segment was $261.2 million and $692.7 million for the quarter and nine months ended September 30, 2020, compared to $208.0 million and $614.2 million for the quarter and nine months ended September 30, 2019, respectively, an increase of 26% for the quarter and an increase of 13% for the nine months. The Wealth Management segment's net income for the quarter and nine months ended September 30, 2020 was $31.9 million and $75.9 million, compared to $26.9 million and $69.8 million for the quarter and nine months ended September 30, 2019, respectively, an increase of 19% for the quarter and an increase of 9% for the nine months. For a discussion of segment results, see "—Business Segments."

Net Interest Income and Net Interest Margin

Net interest income for the quarter and nine months ended September 30, 2020 was $830.3 million and $2.4 billion, compared to $695.0 million and $2.0 billion for the quarter and nine months ended September 30, 2019, respectively, an increase of 19% for the quarter and an increase of 16% for the nine months.

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 quarter and nine months ended September 30, 2020 was 2.71% and 2.72%, compared to 2.80% and 2.87% for the quarter and nine months ended September 30, 2019, respectively. The decreases for the quarter and nine months were primarily due to average yields on earning assets declining more than the offsetting decrease in average funding costs.

Fully taxable-equivalent net interest income for the quarter and nine months ended September 30, 2020 was $862.2 million and $2.5 billion, compared to $721.1 million and $2.1 billion for the quarter and nine months ended September 30, 2019, respectively, an increase of 20% for the quarter and an increase of 16% for the nine months.

On an average basis, interest-earning assets and interest-bearing liabilities for the third quarter of 2020 both increased 24% from the third quarter a year ago. For the nine months ended September 30, 2020, average interest-earning assets and interest-bearing liabilities both increased 23% from the nine months ended September 30, 2019**.**

Yields/Rates (Fully Taxable-Equivalent Basis)

The following tables present 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.

	Quarter Ended September 30,					
	2020			2019 [(4)]		
($ in thousands)	Average Balance	Interest Income/ Expense [(1)]	Yields/ Rates [(2)]	Average Balance	Interest Income/ Expense [(1)]	Yields/ Rates [(2)]
Assets:						
Cash and cash equivalents	$ 4,427,985	$ 1,181	0.11 %	$ 1,161,441	$ 5,430	1.86 %
Investment securities:						
U.S. Government-sponsored agency securities	202,174	1,186	2.35 %	740,893	5,375	2.90 %
Agency residential and commercial MBS	6,250,577	37,437	2.40 %	6,593,422	46,762	2.84 %
Other residential and commercial MBS	37,860	201	2.13 %	4,473	43	3.84 %
Municipal securities	12,309,647	129,097	4.19 %	9,184,274	101,154	4.41 %
Other investment securities [(3)]	44,782	309	2.76 %	24,977	156	2.49 %
Total investment securities	18,845,040	168,230	3.57 %	16,548,039	153,490	3.71 %
Loans: [(4)]						
Residential real estate [(5)]	56,906,612	421,545	2.96 %	45,754,902	374,690	3.27 %
Multifamily [(6)]	13,312,631	124,759	3.67 %	11,391,573	111,727	3.84 %
Commercial real estate	7,801,603	78,412	3.93 %	7,280,053	77,654	4.17 %
Multifamily/commercial construction	2,739,717	30,608	4.37 %	2,294,560	29,055	4.95 %
Business [(7)]	12,538,201	110,487	3.45 %	11,551,439	129,314	4.38 %
PPP	2,091,580	10,825	2.03 %	—	—	— %
Other [(8)]	6,995,592	41,735	2.33 %	5,704,872	48,746	3.34 %
Total loans	102,385,936	818,371	3.16 %	83,977,399	771,186	3.63 %
FHLB stock	457,808	6,116	5.31 %	321,778	5,779	7.13 %
Total interest-earning assets	126,116,769	993,898	3.12 %	102,008,657	935,885	3.63 %
Noninterest-earning assets:						
Noninterest-earning cash	433,852			335,648		
Goodwill and other intangibles	230,051			266,032		
Other assets	5,074,504			4,409,665		
Total noninterest-earning assets	5,738,407			5,011,345		
Total Assets	$ 131,855,176			$ 107,020,002		
Liabilities and Equity:						
Deposits:						
Checking	$ 64,895,753	2,413	0.01 %	$ 48,666,948	8,501	0.07 %
Money market checking and savings	26,220,043	13,675	0.21 %	20,536,777	53,046	1.02 %
CDs	11,334,100	38,267	1.34 %	13,170,046	73,370	2.21 %
Total deposits	102,449,896	54,355	0.21 %	82,373,771	134,917	0.65 %
Borrowings:						
Short-term borrowings	5,030	0	0.00 %	2,204,262	12,520	2.25 %
Long-term FHLB advances	14,739,238	62,201	1.68 %	9,796,739	54,901	2.22 %
Senior notes [(9)]	995,373	6,032	2.42 %	497,384	3,350	2.69 %
Subordinated notes [(9)]	778,151	9,108	4.68 %	777,730	9,103	4.68 %
Total borrowings	16,517,792	77,341	1.86 %	13,276,115	79,874	2.39 %
Total interest-bearing liabilities	118,967,688	131,696	0.44 %	95,649,886	214,791	0.89 %
Noninterest-bearing liabilities	2,082,793			2,037,177		
Preferred equity	1,226,522			940,000		
Common equity	9,578,173			8,392,939		
Total Liabilities and Equity	$ 131,855,176			$ 107,020,002		
Net interest spread [(10)]			2.68 %			2.74 %
Net interest income (fully taxable-equivalent basis) and net interest margin [(11)]		$ 862,202	2.71 %		$ 721,094	2.80 %
Reconciliation of tax-equivalent net interest income to reported net interest income:						
Municipal securities tax-equivalent adjustment		(25,259)			(19,391)	
Business loans tax-equivalent adjustment		(6,663)			(6,718)	
Net interest income, as reported		$ 830,280			$ 694,985	

(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 loan amounts to conform to the current period presentation under CECL.
(5) Includes single family, HELOC, 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 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.

($ in thousands)	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)]
	Nine Months Ended September 30,					
Assets:						
Cash and cash equivalents	$ 3,028,868	$ 5,685	0.25 %	$ 1,231,578	$ 18,966	2.06 %
Investment securities:						
U.S. Government-sponsored agency securities	241,343	4,760	2.63 %	938,081	20,827	2.96 %
Agency residential and commercial MBS	6,536,601	127,283	2.60 %	6,705,085	144,106	2.87 %
Other residential and commercial MBS	23,118	415	2.40 %	4,508	131	3.88 %
Municipal securities	11,874,265	379,182	4.26 %	8,624,534	293,060	4.53 %
Other investment securities [(3)]	44,125	939	2.83 %	21,121	403	2.54 %
Total investment securities	18,719,452	512,579	3.65 %	16,293,329	458,527	3.75 %
Loans: [(4)]						
Residential real estate [(5)]	53,991,954	1,231,219	3.04 %	43,212,352	1,073,950	3.31 %
Multifamily [(6)]	12,923,436	364,360	3.70 %	10,980,052	320,977	3.85 %
Commercial real estate	7,698,522	234,655	4.00 %	6,978,946	223,602	4.22 %
Multifamily/commercial construction	2,641,375	90,361	4.49 %	2,286,710	85,971	4.96 %
Business [(7)]	12,665,609	349,205	3.62 %	11,216,470	382,143	4.49 %
PPP	1,240,568	18,484	1.96 %	—	—	— %
Other [(8)]	6,703,449	131,423	2.58 %	5,382,125	139,274	3.41 %
Total loans	97,864,913	2,419,707	3.27 %	80,056,655	2,225,917	3.69 %
FHLB stock	452,260	18,135	5.36 %	310,758	15,768	6.78 %
Total interest-earning assets	120,065,493	2,956,106	3.26 %	97,892,320	2,719,178	3.69 %
Noninterest-earning assets:						
Noninterest-earning cash	434,181			341,984		
Goodwill and other intangibles	232,014			269,246		
Other assets	4,901,072			4,306,791		
Total noninterest-earning assets	5,567,267			4,918,021		
Total Assets	$ 125,632,760			$ 102,810,341		
Liabilities and Equity:						
Deposits:						
Checking	$ 59,266,405	13,972	0.03 %	$ 47,006,632	21,541	0.06 %
Money market checking and savings	24,283,378	73,769	0.41 %	19,714,378	146,900	1.00 %
CDs	12,742,008	157,939	1.66 %	12,457,649	203,411	2.18 %
Total deposits	96,291,791	245,680	0.34 %	79,178,659	371,852	0.63 %
Borrowings:						
Short-term borrowings	411,712	4,700	1.52 %	2,016,744	36,832	2.44 %
Long-term FHLB advances	14,676,405	197,158	1.79 %	9,149,268	147,669	2.16 %
Senior notes [(9)]	918,809	16,839	2.44 %	741,731	14,818	2.66 %
Subordinated notes [(9)]	778,045	27,320	4.68 %	777,629	27,305	4.68 %
Total borrowings	16,784,971	246,017	1.96 %	12,685,372	226,624	2.39 %
Total interest-bearing liabilities	113,076,762	491,697	0.58 %	91,864,031	598,476	0.87 %
Noninterest-bearing liabilities	2,060,245			1,780,107		
Preferred equity	1,172,372			940,000		
Common equity	9,323,381			8,226,203		
Total Liabilities and Equity	$ 125,632,760			$ 102,810,341		
Net interest spread [(10)]			2.68 %			2.82 %
Net interest income (fully taxable-equivalent basis) and net interest margin [(11)]		$ 2,464,409	2.72 %		$ 2,120,702	2.87 %
Reconciliation of tax-equivalent net interest income to reported net interest income:						
Municipal securities tax-equivalent adjustment		(74,524)			(56,620)	
Business loans tax-equivalent adjustment		(20,061)			(20,033)	
Net interest income, as reported		$ 2,369,824			$ 2,044,049	

(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 loan amounts to conform to the current period presentation under CECL.
(5) Includes single family, HELOC, 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 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 September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change Quarter Ended September 30, 2020 vs. 2019	% Change Nine Months Ended September 30, 2020 vs. 2019
Interest income:						
Loans	$ 811,708	$ 764,468	$ 2,399,646	$ 2,205,884	6 %	9 %
Investments	142,971	134,099	438,055	401,908	7 %	9 %
Other [(1)]	6,116	5,779	18,135	15,767	6 %	15 %
Cash and cash equivalents	1,181	5,430	5,685	18,966	(78)%	(70)%
Total interest income	$ 961,976	$ 909,776	$ 2,861,521	$ 2,642,525	6 %	8 %
Fully taxable-equivalent interest income:						
Loans	$ 818,371	$ 771,186	$ 2,419,707	$ 2,225,917	6 %	9 %
Investments	$ 168,230	$ 153,490	$ 512,579	$ 458,527	10 %	12 %

(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 $962.0 million and $2.9 billion for the quarter and nine months ended September 30, 2020, compared to $909.8 million and $2.6 billion for the quarter and nine months ended September 30, 2019, respectively. The increase for the third quarter of 2020 was the result of an increase of 24% in average interest-earning assets, which were $126.1 billion, compared to $102.0 billion for the third quarter of 2019, partially offset by a decrease in the average yield on interest-earning assets to 3.12% from 3.63% for the third quarter of 2019. The increase for the nine months ended September 30, 2020 was the result of an increase of 23% in average interest-earning assets, which were $120.1 billion, compared to $97.9 billion for the nine months ended September 30, 2019, partially offset by a decrease in the average yield on interest-earning assets to 3.26% from 3.69% for the nine months ended September 30, 2019.

Loans

Interest income on loans for the quarter and nine months ended September 30, 2020 was $811.7 million and $2.4 billion, compared to $764.5 million and $2.2 billion for the quarter and nine months ended September 30, 2019, respectively. The increases were due to continued loan growth, partially offset by decreases in the average yield. Fully taxable-equivalent interest income on loans was $818.4 million for the third quarter of 2020, compared to $771.2 million for the third quarter of 2019, and was $2.4 billion for the nine months ended September 30, 2020, compared to $2.2 billion for the nine months ended September 30, 2019.

Average loan balances were $102.4 billion for the third quarter of 2020, compared to $84.0 billion for the third quarter of 2019, an increase of 22%, and were $97.9 billion for the nine months ended September 30, 2020, compared to $80.1 billion for the nine months ended September 30, 2019, an increase of 22%. The average yield on loans was 3.16% for the third quarter of 2020, compared to 3.63% for the third quarter of 2019, and was 3.27% for the nine months ended September 30, 2020, compared to 3.69% for the nine months ended September 30, 2019. The decreases in the average yield on loans were driven by the decreases in the average federal funds rate, which was 0.25% and 0.63% for the quarter and nine months ended September 30, 2020, compared to 2.30% and 2.43% for the quarter and nine months ended September 30, 2019, respectively, as well as lower term rates on new loans.

Interest income on loans included prepayment penalty fees of $5.6 million and $13.0 million for the quarter and nine months ended September 30, 2020, compared to $2.7 million and $9.1 million for the quarter and nine months ended September 30, 2019, respectively. The increase in these fees for the quarter was primarily due to higher prepayments on multifamily loans. The increase in these fees for the nine months was primarily due to higher prepayments on multifamily and single family 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 3.13% at September 30, 2020, compared to 3.50% at December 31, 2019 and 3.59% at September 30, 2019. For ARMs, the yield is also affected by the timing of changes in the loan rates, which generally lag market rate changes. At September 30, 2020, approximately 26% of our total loans were adjustable-rate or mature within one year, compared to 29% and 30% at December 31, 2019 and September 30, 2019, respectively.

Investments

Interest income on investments for the quarter and nine months ended September 30, 2020 was $143.0 million and $438.1 million, compared to $134.1 million and $401.9 million for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to higher average investment balances, partially offset by lower average yield. Fully taxable-equivalent interest income on investments was $168.2 million and $512.6 million for the quarter and nine months ended September 30, 2020, compared to $153.5 million and $458.5 million for the quarter and nine months ended September 30, 2019.

Average investment balances were $18.8 billion for the third quarter of 2020, compared to $16.5 billion for the third quarter of 2019, a 14% increase, and were $18.7 billion for the nine months ended September 30, 2020, compared to $16.3 billion for the nine months ended September 30, 2019, a 15% increase. The increases for the quarter and nine months were primarily due to investment purchases, partially offset by payments. The average yield on investment securities for the third quarter of 2020 was 3.57%, compared to 3.71% for the third quarter of 2019, a decline of 14 bps, and was 3.65% for the nine months ended September 30, 2020, compared to 3.75% for the nine months ended September 30, 2019, a decline of 10 bps. The yield declines for the quarter and nine months were the result of lower yields on municipal securities and agency residential and commercial MBS.

FHLB Stock

Dividends on FHLB stock for the quarter and nine months ended September 30, 2020 were $6.1 million and $18.1 million, compared to $5.8 million and $15.8 million for the quarter and nine months ended September 30, 2019, respectively. The increases in dividend income for these periods were primarily driven by increases in average FHLB stock balances, partially offset by lower average yield. Average FHLB stock balances were $457.8 million for the third quarter of 2020, compared to $321.8 million for the third quarter of 2019, an increase of 42%, and were $452.3 million for the nine months ended September 30, 2020, compared to $310.8 million for the nine months ended September 30, 2019, an increase of 46%. The average yield on FHLB stock was 5.31% for the third quarter of 2020, compared to 7.13% for the third quarter of 2019, and was 5.36% for the nine months ended September 30, 2020, compared to 6.78% for the nine months ended September 30, 2019.

Interest Expense

The following table presents interest expense:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change Quarter Ended September 30, 2020 vs. 2019	% Change Nine Months Ended September 30, 2020 vs. 2019
Interest expense:						
Deposits:						
Checking	$ 2,413	$ 8,501	$ 13,972	$ 21,541	(72)%	(35)%
Money market checking and savings	13,675	53,046	73,769	146,900	(74)%	(50)%
CDs	38,267	73,370	157,939	203,411	(48)%	(22)%
Total interest expense on deposits	54,355	134,917	245,680	371,852	(60)%	(34)%
Borrowings:						
Short-term borrowings	0	12,520	4,700	36,832	NM	(87)%
Long-term FHLB advances	62,201	54,901	197,158	147,669	13 %	34 %
Senior notes	6,032	3,350	16,839	14,818	80 %	14 %
Subordinated notes	9,108	9,103	27,320	27,305	0 %	0 %
Total interest expense on borrowings	77,341	79,874	246,017	226,624	(3)%	9 %
Total interest expense	$ 131,696	$ 214,791	$ 491,697	$ 598,476	(39)%	(18)%

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

Total interest expense consists of interest expense on deposits, federal funds purchased, FHLB advances, senior notes, subordinated notes and other borrowings. Total interest expense was $131.7 million and $491.7 million for the quarter and nine months ended September 30, 2020, compared to $214.8 million and $598.5 million for the quarter and nine months ended September 30, 2019, respectively. The decrease for the third quarter of 2020 was the result of a decline in the average cost of interest-bearing liabilities to 0.44% from 0.89% for the third quarter of 2019, partially offset by an increase of 24% in average interest-bearing liabilities, which were $119.0 billion, compared to $95.6 billion for the third quarter of 2019. The decrease for the nine months ended September 30, 2020 was the result of a decline in the average cost of interest-bearing liabilities to 0.58% from 0.87% for the nine months ended September 30, 2019, partially offset by an increase of 23% in average interest-bearing liabilities, which were $113.1 billion, compared to $91.9 billion for the nine months ended September 30, 2019.

Deposits

Interest expense on deposits was $54.4 million and $245.7 million for the quarter and nine months ended September 30, 2020, compared to $134.9 million and $371.9 million for the quarter and nine months ended September 30, 2019, respectively. The decreases in interest expense were driven by decreases in rates paid on deposits due to decreases in market interest rates, partially offset by growth in deposit balances. The average interest rate paid on deposits was 0.21% and 0.65% for the third quarter of 2020 and 2019, and was 0.34% and 0.63% for the nine months ended September 30, 2020 and 2019, respectively. Such decreases in rates paid were impacted by the decreases in the average federal funds rate, which was 0.25% and 0.63% for the quarter and nine months ended September 30, 2020, compared to 2.30% and 2.43% for the quarter and nine months ended September 30, 2019, respectively.

Interest expense on checking deposits was $2.4 million and $14.0 million for the quarter and nine months ended September 30, 2020, compared to $8.5 million and $21.5 million for the quarter and nine months ended September 30, 2019, respectively. The decreases were due to decreases in rates paid, partially offset by increases in average balances. The average interest rate paid on checking deposits was 0.01% and 0.03% for the quarter and nine months ended September 30, 2020, compared to 0.07% and 0.06% for the quarter and nine months ended September 30, 2019, respectively. Average checking deposit balances were $64.9 billion and $59.3 billion for the quarter and nine months ended September 30, 2020, compared to $48.7 billion and $47.0 billion for the quarter and nine months ended September 30, 2019, an increase of 33% for the quarter and an increase of 26% for the nine months, respectively.

Interest expense on money market checking and savings deposits was $13.7 million and $73.8 million for quarter and nine months ended September 30, 2020, compared to $53.0 million and $146.9 million for the quarter and nine months ended September 30, 2019, respectively. The decreases were due to decreases in rates paid, partially offset by increases in average balances. The average interest rate paid on money market checking and savings deposits was 0.21% and 0.41% for the quarter and nine months ended September 30, 2020, compared to 1.02% and 1.00% for the quarter and nine months ended September 30, 2019, respectively. Average money market checking and savings deposit balances were $26.2 billion and $24.3 billion for the quarter and nine months ended September 30, 2020, compared to $20.5 billion and $19.7 billion for the quarter and nine months ended September 30, 2019, an increase of 28% for the quarter and an increase of 23% for the nine months, respectively.

Interest expense on CDs was $38.3 million and $157.9 million for the quarter and nine months ended September 30, 2020, compared to $73.4 million and $203.4 million for the quarter and nine months ended September 30, 2019, respectively. The decrease for the quarter was due to a decrease in the rate paid and a decrease in the average balance. The decrease for the nine months was due to a decrease in the rate paid, partially offset by an increase in the average balance. The average interest rate paid on CDs was 1.34% and 1.66% for the quarter and nine months ended September 30, 2020, compared to 2.21% and 2.18% for the quarter and nine months ended September 30, 2019, respectively. Average CD balances were $11.3 billion and $12.7 billion for the quarter and nine months ended September 30, 2020, compared to $13.2 billion and $12.5 billion for the quarter and nine months ended September 30, 2019, a decrease of 14% for the quarter and an increase of 2% for the nine months, respectively.

Average deposit balances were $102.4 billion for the third quarter of 2020, an increase of 24% from $82.4 billion for the third quarter of 2019, and were $96.3 billion for the nine months ended September 30, 2020, an increase of 22% from $79.2 billion for the nine months ended September 30, 2019. The following table presents average deposit balances by deposit type as a percentage of average total deposits:

	Quarter Ended September 30,		Nine Months Ended September 30,	
Average Deposits by Type as a % of Average Total Deposits	**2020**	**2019**	**2020**	**2019**
Checking	63 %	59 %	62 %	59 %
Money market checking and savings	26 %	25 %	25 %	25 %
CDs	11 %	16 %	13 %	16 %

At September 30, 2020, our total deposits were $104.4 billion, compared to $85.7 billion at September 30, 2019, an increase of 22%, and the weighted average contractual rate paid on total deposits was 0.12% 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 $77.3 million and $246.0 million for the quarter and nine months ended September 30, 2020, compared to $79.9 million and $226.6 million for the quarter and nine months ended September 30, 2019, respectively. The decrease for the quarter was primarily due to a decrease in the average cost of borrowings, partially offset by an increase in average long-term FHLB advances. The increase for the nine months was primarily due to an increase in average long-term FHLB advances, partially offset by a decrease in the average cost of borrowings.

Short-term borrowings, which include federal funds purchased and short-term FHLB advances, have an original maturity of one year or less. At September 30, 2020, short-term borrowings were $5.0 million, compared to $775.0 million at September 30, 2019. We had no interest expense on short-term borrowings for the quarter ended September 30, 2020, compared to $12.5 million for the quarter ended September 30, 2019. Interest expense on short-term borrowings was $4.7 million for the nine months ended September 30, 2020, compared to $36.8 million for the nine months ended September 30, 2019. The decreases were due to lower average balances, as well as decreases in the average cost of federal funds purchased and short-term FHLB advances. The average cost of short-term borrowings was 0% and 1.52% for the quarter and nine months ended September 30, 2020, and was 2.25% and 2.44% for the quarter and nine months ended September 30, 2019, respectively. Such decreases in the average cost were consistent with the decreases in the average federal funds rate, which was 0.25% and 0.63% for the quarter and nine months ended September 30, 2020, compared to 2.30% and 2.43% for the quarter and nine months ended September 30, 2019, respectively. Additionally, short-term borrowings for the quarter ended September 30, 2020, which consisted entirely of short-term FHLB advances, had a 0% interest rate under a temporary COVID-19 relief measure to support bank lending. Average short-term borrowings for the quarters ended September 30, 2020 and 2019 were $5.0 million and $2.2 billion, and were $411.7 million and $2.0 billion for the nine months ended September 30, 2020 and 2019, respectively.

At September 30, 2020, long-term FHLB advances outstanding were $13.5 billion, compared to $10.9 billion at September 30, 2019. Interest expense on long-term FHLB advances was $62.2 million and $197.2 million for the quarter and nine months ended September 30, 2020, compared to $54.9 million and $147.7 million for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to increases in average balances, partially offset by decreases in the average cost of long-term FHLB advances. Average long-term FHLB advances for the third quarter of 2020 were $14.7 billion, compared to $9.8 billion for the third quarter of 2019, an increase of 50%, and were $14.7 billion for the nine months ended September 30, 2020, compared to $9.1 billion for the nine months ended September 30, 2019, an increase of 60%. Average long-term FHLB advances as a proportion of total average interest-bearing liabilities were 12% and 13% for the quarter and nine months ended September 30, 2020, compared to 10% for both the quarter and nine months ended September 30, 2019, respectively. The average cost of long-term FHLB advances was 1.68% and 2.22% for the third quarter of 2020 and 2019, respectively, and was 1.79% and 2.16% for the nine months ended September 30, 2020 and 2019, respectively. The decreases were the result of lower interest rates on new advances, compared to the interest rates on matured borrowings.

At September 30, 2020, the carrying value of unsecured senior notes was $995.6 million, compared to $497.5 million at September 30, 2019. Interest expense on our fixed-rate senior notes was $6.0 million and $16.8 million for the quarter and nine months ended September 30, 2020, compared to $3.4 million and $14.8 million for the quarter and nine months ended September 30, 2019, respectively, 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 September 30, 2020, the carrying value of unsecured subordinated notes totaled $778.2 million, compared to $777.8 million at September 30, 2019. Interest expense on our fixed-rate subordinated notes was $9.1 million for both the quarters ended September 30, 2020 and 2019, and $27.3 million for both the nine months ended September 30, 2020 and 2019, respectively, 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 September 30,		Nine Months Ended September 30,		% Change Quarter Ended September 30,	% Change Nine Months Ended September 30,
($ in thousands)	**2020**	**2019**	**2020**	**2019**	**2020 vs. 2019**	**2020 vs. 2019**
Provision for credit losses:						
Debt securities held-to-maturity	$ 333	$ —	$ 1,047	$ —	NM	NM
Loans	22,437	16,711	113,305	52,111	34 %	117 %
Unfunded loan commitments [1]	5,768	—	7,673	—	NM	NM
Total	$ 28,538	$ 16,711	$ 122,025	$ 52,111	71 %	134 %

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

[1] The provision for unfunded loan commitments is included in the provision for credit losses for the quarter and nine months ended September 30, 2020. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense, which is not presented in this table.

Beginning in the first quarter of 2020, the Bank adopted the CECL methodology under ASC 326, in which the ACL 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. Additionally, 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. Prior to adoption of ASC 326, the level of provision for credit losses on loans was based on an incurred loss methodology, which did not incorporate lifetime expected losses or macroeconomic forecasts. The provision for credit losses was $28.5 million and $122.0 million for the quarter and nine months ended September 30, 2020, compared to $16.7 million and $52.1 million for the quarter and nine months ended September 30, 2019. The increases primarily resulted from loan growth and the implementation of the CECL methodology beginning in 2020, which incorporates an economic outlook reflecting the impact of COVID-19.

The macroeconomic forecasts used in determining the ACL, under different conditions or using different assumptions or estimates, could result in significantly different changes in the ACL. It is difficult to estimate how potential changes in specific factors might affect the overall ACL 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 September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change Quarter Ended September 30, 2020 vs. 2019	% Change Nine Months Ended September 30, 2020 vs. 2019
Noninterest income:						
Investment management fees	$ 96,638	$ 83,582	$ 281,017	$ 262,226	16 %	7 %
Brokerage and investment fees	10,796	12,673	39,028	28,619	(15)%	36 %
Insurance fees	2,216	2,712	6,086	8,522	(18)%	(29)%
Trust fees	4,543	4,105	14,118	12,221	11 %	16 %
Foreign exchange fee income	12,575	11,685	34,864	30,661	8 %	14 %
Deposit fees	5,753	6,563	17,598	19,462	(12)%	(10)%
Loan and related fees	7,171	5,341	20,741	13,644	34 %	52 %
Loan servicing fees, net	144	2,347	(2,649)	9,560	(94)%	NM
Gain on sale of loans	13,797	122	14,575	466	NM	NM
Gain (loss) on investment securities	(405)	(683)	3,752	(1,895)	(41)%	NM
Income from investments in life insurance	20,546	12,152	36,506	31,536	69 %	16 %
Other income (loss)	(2,791)	1,608	960	4,853	NM	(80)%
Total noninterest income	$ 170,983	$ 142,207	$ 466,596	$ 419,875	20 %	11 %

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

Noninterest income for the quarter and nine months ended September 30, 2020 was $171.0 million and $466.6 million, compared to $142.2 million and $419.9 million for the quarter and nine months ended September 30, 2020. The increases were primarily driven by an elevated gain on sale of loans, higher investment management fees, and income from investments in life insurance. The increase for the nine months was partially offset by lower loan servicing fees due to a valuation allowance established on MSRs.

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 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 for the quarter and nine months ended September 30, 2020 were $96.6 million and $281.0 million, compared to $83.6 million and $262.2 million for the quarter and nine months ended September 30, 2019, respectively. The increases in investment management fees for the quarter and nine months were primarily driven by growth in AUM. 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 $74.7 billion at September 30, 2020, compared to $61.2 billion at September 30, 2019, an increase of 22% primarily due to net client inflow and market appreciation. 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 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 for the quarter and nine months ended September 30, 2020 were $10.8 million and $39.0 million, compared to $12.7 million and $28.6 million for the quarter and nine months ended September 30, 2019, respectively. The decrease for the quarter was primarily due to lower transaction volume. The increase for the nine months was primarily due to market volatility in the first half of 2020, which resulted in 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 September 30, 2020, we held $81.2 billion of client assets in brokerage accounts through FRSC and in third-party money market mutual funds, compared to $67.5 billion at September 30, 2019, an increase of 20%, primarily due to net client inflow and market appreciation.

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 for the quarter and nine months ended September 30, 2020 were $2.2 million and $6.1 million, compared to $2.7 million and $8.5 million for the quarter and nine months ended September 30, 2019, respectively. 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. 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 were $4.5 million and $14.1 million for the quarter and nine months ended September 30, 2020, compared to $4.1 million and $12.2 million for the quarter and nine months ended September 30, 2019, respectively. At September 30, 2020, assets under custody or administration were $12.3 billion, compared to $11.6 billion at September 30, 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 foreign exchange fee income of $12.6 million and $34.9 million for the quarter and nine months ended September 30, 2020, compared to $11.7 million and $30.7 million for the quarter and nine months ended September 30, 2019, respectively. The increase in foreign exchange fees for the quarter was primarily driven by higher transaction volume from both existing and new clients, as well as favorable exchange rate fluctuations. The increase in foreign exchange fees for the nine months 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 $5.8 million and $17.6 million for the quarter and nine months ended September 30, 2020, compared to $6.6 million and $19.5 million for the quarter and nine months ended September 30, 2019, respectively. The decreases in deposit fees were primarily driven by declines in ATM fees and interchange fees, as well as fee waivers provided as a result of the pandemic.

Loan and related fees. Loan and related fee income was $7.2 million and $20.7 million for the quarter and nine months ended September 30, 2020, compared to $5.3 million and $13.6 million for the quarter and nine months ended September 30, 2019, respectively. 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 MSRs and the amount of provisions for, or reversal of, the MSR valuation allowance. The following table presents net loan servicing fees:

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Contractually specified servicing fees	$ 4,969	$ 6,517	$ 15,968	$ 20,458
MSR amortization expense	(3,322)	(3,540)	(10,478)	(10,268)
MSR provision for valuation allowance	(1,503)	(630)	(8,139)	(630)
Loan servicing fees, net	$ 144	$ 2,347	$ (2,649)	$ 9,560

Net loan servicing fees were $144,000 and $(2.6) million for the quarter and nine months ended September 30, 2020, compared to $2.3 million and $9.6 million for the quarter and nine months ended September 30, 2019, respectively. The decreases were primarily due to declines in the size of the servicing portfolio and the higher provision for valuation allowance established on MSRs due to accelerated repayments of loans in the servicing portfolio. The average servicing portfolio was $8.2 billion and $8.7 billion for the quarter and nine months ended September 30, 2020, compared to $10.5 billion and $11.1 billion for the quarter and nine months ended September 30, 2019, respectively, a decrease of 22% for the quarter and a decrease of 21% for the nine months.

Contractual servicing fees were $5.0 million and $16.0 million for the quarter and nine months ended September 30, 2020, compared to $6.5 million and $20.5 million for the quarter and nine months ended September 30, 2019, respectively, a decrease of 24% for the quarter and a decrease of 22% for the nine months. 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 0.24% and 0.25% for the third quarter of 2020 and 2019, respectively, and 0.24% and 0.25% for the nine months ended September 30, 2020 and 2019, respectively.

The amount of net loan servicing fees that we record is affected by the rate of repayment of loans in the servicing portfolio. The overall annualized repayment speed experienced on loans serviced was 32% and 29% for the quarter and nine months ended September 30, 2020, compared to 24% and 19% for the quarter and nine months ended September 30, 2019, respectively. If actual repayments of loans serviced are lower than our estimate of future repayments, we could reduce the amortization of MSRs and release the valuation allowance 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 a provision for 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 ALM 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 September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Gain on sale of loans [(1)]	$ 13,797	$ 122	$ 14,575	$ 466
Loans sold	$ 279,850	$ 37,146	$ 1,086,089	$ 246,811
Gain as a percentage of loans sold [(1)]	4.93 %	0.33 %	1.34 %	0.19 %

[(1)] The gain for the quarter and nine months ended September 30, 2020 included $10.3 million related to realized discounts on previously purchased loans when these loans were sold. Excluding these discounts of $10.3 million, the gain as a percentage of loans sold was 1.24% and 0.39% for the quarter and nine months ended September 30, 2020, respectively.

The gain on sale of loans for the quarter and nine months ended September 30, 2020 included $10.3 million related to realized discounts on previously purchased loans when these loans were sold. In addition, the increases in gain on sale of loans were the result of a higher volume of loans sold and higher margins. For the nine months ended September 30, 2020, the increase was partially offset by costs associated with our first sponsored securitization since 2002.

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 September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Net gain (loss) on sales of investment securities	$ (10)	$ (890)	$ 2,629	$ (2,912)
Net change in fair value of equity securities	(395)	207	1,123	1,017
Gain (loss) on investment securities	$ (405)	$ (683)	$ 3,752	$ (1,895)

Income from investments in life insurance. Income from investments in life insurance was $20.5 million and $36.5 million for the quarter and nine months ended September 30, 2020, compared to $12.2 million and $31.5 million for the quarter and nine months ended September 30, 2019, respectively. Income from investments in life insurance for the quarter and nine months ended September 30, 2020, included a $5.3 million gain from life insurance proceeds. The book value of this portfolio of tax-exempt investments was $1.9 billion and $1.4 billion at September 30, 2020 and 2019, respectively. The increase was primarily due to purchases of investments in life insurance.

Noninterest Expense

The following table presents noninterest expense:

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change Quarter Ended September 30, 2020 vs. 2019	% Change Nine Months Ended September 30, 2020 vs. 2019
Noninterest expense:						
Salaries and employee benefits	$ 373,225	$ 309,655	$ 1,078,633	$ 920,432	21 %	17 %
Information systems	74,549	66,612	219,301	204,059	12 %	7 %
Occupancy	55,543	50,722	164,125	142,204	10 %	15 %
Professional fees	19,845	17,507	48,479	45,623	13 %	6 %
Advertising and marketing	8,909	15,912	29,373	48,346	(44)%	(39)%
FDIC assessments	11,003	9,748	32,463	27,847	13 %	17 %
Other expenses	65,136	63,794	187,311	199,105	2 %	(6)%
Total noninterest expense	$ 608,210	$ 533,950	$ 1,759,685	$ 1,587,616	14 %	11 %

Noninterest expense for the quarter and nine months ended September 30, 2020 was $608.2 million and $1.8 billion, compared to $534.0 million and $1.6 billion for the quarter and nine months ended September 30, 2019, respectively. The increases in noninterest expense were primarily due to higher staffing levels and resultant higher salaries and benefits, as well as increased information systems costs from the continued investments in the expansion of the franchise, partially offset by lower travel and entertainment, as well as advertising and marketing costs as a result of the pandemic.

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 $61.7 million and $162.7 million for the quarter and nine months ended September 30, 2020, compared to $47.9 million and $123.0 million for the quarter and nine months ended September 30, 2019, respectively, an increase of 29% for the quarter and an increase of 32% for the nine months. 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 60.7% for the third quarter of 2020, compared to 63.8% for the third quarter of 2019, and was 62.0% for the nine months ended September 30, 2020, compared to 64.4% for the nine months ended September 30, 2019. The decreases in the efficiency ratio were primarily due to lower travel and entertainment, as well as advertising and marketing costs as a result of the pandemic. The decreases in the efficiency ratio were also driven by an elevated gain on sale of loans, which included $10.3 million related to realized discounts on previously purchased loans when these loans were sold, and income from investments in life insurance, which included a $5.3 million gain from life insurance proceeds. In addition, the efficiency ratio reflects the impact of including the provision for unfunded loan commitments in the provision for credit losses for the quarter and nine months ended September 30, 2020. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense.

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 $373.2 million and $1.1 billion for the quarter and nine months ended September 30, 2020, compared to $309.7 million and $920.4 million for the quarter and nine months ended September 30, 2019, respectively. The increases were 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 the franchise, as well as in response to the pandemic. At September 30, 2020, we had 5,294 full-time equivalent employees, including temporary employees and independent contractors, an 8% increase from 4,880 at September 30, 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 $74.5 million and $219.3 million for the quarter and nine months ended September 30, 2020, compared to $66.6 million and $204.1 million for the quarter and nine months ended September 30, 2019, respectively. The increases were 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.

Occupancy. Occupancy costs were $55.5 million and $164.1 million for the quarter and nine months ended September 30, 2020, compared to $50.7 million and $142.2 million for the quarter and nine months ended September 30, 2019, respectively. The increases were 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 $19.8 million and $48.5 million for the quarter and nine months ended September 30, 2020, compared to $17.5 million and $45.6 million for the quarter and nine months ended September 30, 2019, respectively. The increases for the quarter and nine months were primarily due to higher consulting and legal fees. The increase for the nine months was partially offset by lower 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 $8.9 million and $29.4 million for the quarter and nine months ended September 30, 2020, compared to $15.9 million and $48.3 million for the quarter and nine months ended September 30, 2019, respectively. 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 decreases were primarily due to a decrease in advertising and decreased costs associated with holding client events as a result of the pandemic.

FDIC assessments. FDIC assessments were $11.0 million and $32.5 million for the quarter and nine months ended September 30, 2020, compared to $9.7 million and $27.8 million for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to growth in the assessment base as a result of the growth in average total assets.

Other expenses. Other expenses were $65.1 million and $187.3 million for the quarter and nine months ended September 30, 2020, compared to $63.8 million and $199.1 million for the quarter and nine months ended September 30, 2019, respectively. These expenses include costs related to lending and deposit activities, client service, insurance, hiring and other costs related to expanding operations, as well as amortization of intangibles. The decreases in deposit client related costs were primarily due to lower expenses associated with foreign currency deposit balances. The decreases in travel and entertainment were the result of decreased activity resulting from the pandemic. Other operating expenses include training, employee event costs, postage, charitable contributions, cash management, custody and clearing, and other miscellaneous expenses, such as prepayment penalties on FHLB advances. For the quarter and nine months ended September 30, 2020, other operating expenses increased primarily from prepayment penalties on FHLB advances and increases in charitable contributions, partially offset by decreases in costs for conferences and other training events due to decreased activity resulting from the pandemic. The following table presents the main components of other expenses:

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Deposit client related costs	$ 9,131	$ 18,489	$ 29,500	$ 59,013
Loan related costs	6,754	4,551	15,906	12,676
Subscriptions	4,510	4,513	13,638	12,607
Travel and entertainment	2,000	6,429	8,696	19,518
Insurance	3,337	2,983	9,354	8,709
Amortization of intangibles	1,790	2,832	6,084	9,316
Recruiting	2,424	2,733	6,658	9,623
Other operating expenses	35,190	21,264	97,475	67,643
Total other expenses	$ 65,136	$ 63,794	$ 187,311	$ 199,105

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 third quarter of 2020 was 19.6%, compared to 18.0% for the third quarter of 2019. The Bank's effective tax rate for the nine months ended September 30, 2020 was 19.5%, compared to 17.0% for the nine months ended September 30, 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 increases for the quarter and nine months were primarily the result of lower excess tax benefits from a decrease in stock options exercised by employees, partially offset by a tax refund from an amended tax return.

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

	Quarter Ended September 30,		Nine Months Ended September 30,	
Effective Tax Rate	**2020**	**2019**	**2020**	**2019**
Effective tax rate, prior to excess tax benefits and tax refund from an amended tax return	21.1 %	21.4 %	21.6 %	21.4 %
Excess tax benefits—stock options	(0.1)	(3.3)	(0.8)	(3.6)
Excess tax benefits—other stock awards	(0.1)	(0.1)	(0.8)	(0.8)
Total excess tax benefits	(0.2)	(3.4)	(1.6)	(4.4)
Tax refund from an amended tax return	(1.3)	—	(0.5)	—
Effective tax rate	19.6 %	18.0 %	19.5 %	17.0 %

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 September 30,				Nine Months Ended September 30,			
	2020		2019		2020		2019	
($ in thousands)	**Number of Awards Exercised or Vested**	**Related Excess Tax Benefit**	**Number of Awards Exercised or Vested**	**Related Excess Tax Benefit**	**Number of Awards Exercised or Vested**	**Related Excess Tax Benefit**	**Number of Awards Exercised or Vested**	**Related Excess Tax Benefit**
Stock options	18,730	$ 527	432,822	$ 9,579	301,903	$ 8,006	1,304,375	$ 30,016
Other stock awards	52,095	274	49,094	34	1,054,313	7,315	1,187,185	6,164
Total	70,825	$ 801	481,916	$ 9,613	1,356,216	$ 15,321	2,491,560	$ 36,180

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 in "Item 1. Financial Statements."

Commercial Banking

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

($ in thousands)	Quarter Ended September 30, 2020	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change Quarter Ended September 30, 2020 vs. 2019	% Change Nine Months Ended September 30, 2020 vs. 2019
Net interest income	$ 796,989	$ 673,801	$ 2,285,329	$ 1,979,184	18 %	15 %
Provision for credit losses	28,538	16,711	122,025	52,111	71 %	134 %
Noninterest income	43,070	27,232	88,764	76,425	58 %	16 %
Noninterest expense	491,949	435,858	1,400,636	1,276,182	13 %	10 %
Income before provision for income taxes	319,572	248,464	851,432	727,316	29 %	17 %
Provision for income taxes	58,324	40,510	158,763	113,107	44 %	40 %
Net income	$ 261,248	$ 207,954	$ 692,669	$ 614,209	26 %	13 %

Net interest income for Commercial Banking for the quarter and nine months ended September 30, 2020 was $797.0 million and $2.3 billion, compared to $673.8 million and $2.0 billion for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to increases in average interest-earning assets, partially offset by decreases in net interest margin.

Beginning in the first quarter of 2020, the Bank adopted the CECL methodology under ASC 326, in which the ACL 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. Additionally, 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. Prior to adoption of ASC 326, the level of provision for credit losses on 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 for the quarter and nine months ended September 30, 2020 was $28.5 million and $122.0 million, compared to $16.7 million and $52.1 million for the quarter and nine months ended September 30, 2019, respectively. The increases primarily resulted from loan growth and the implementation of the CECL methodology beginning in 2020, which incorporates an economic outlook reflecting the impact of COVID-19. The macroeconomic forecasts used in determining the ACL, under different conditions or using different assumptions or estimates, could result in significantly different changes in the ACL. It is difficult to estimate how potential changes in specific factors might affect the overall ACL and current results may not reflect the potential future impact of macroeconomic forecast changes.

Noninterest income for Commercial Banking was $43.1 million and $88.8 million for the quarter and nine months ended September 30, 2020, compared to $27.2 million and $76.4 million for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily driven by the elevated gain on sale of loans, which included $10.3 million related to realized discounts on previously purchased loans when these loans were sold, and income from investments in life insurance, which included a $5.3 million gain from life insurance proceeds. The increase for the nine months was partially offset by lower loan servicing fees due to a valuation allowance established on MSRs.

Noninterest expense for Commercial Banking was $491.9 million and $1.4 billion for the quarter and nine months ended September 30, 2020, compared to $435.9 million and $1.3 billion for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to higher staffing levels and resultant higher salaries and benefits, as well as increased information systems costs from the continued investments in the expansion of the franchise, partially offset by lower travel and entertainment, as well as advertising and marketing costs as a result of the pandemic. The increases were primarily attributable to the addition of new personnel, higher incentive compensation and other activities that support lending and deposit growth, as well as in response to the pandemic.

Provision for income taxes for Commercial Banking for the quarter and nine months ended September 30, 2020 was $58.3 million and $158.8 million, compared to $40.5 million and $113.1 million for the quarter and nine months ended September 30, 2019, respectively. The increases were primarily due to higher pre-tax income and lower excess tax benefits from a decrease in stock options exercised by employees, partially offset by a tax refund from an amended tax return.

Wealth Management

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

	Quarter Ended September 30,		Nine Months Ended September 30,		% Change Quarter Ended September 30,	% Change Nine Months Ended September 30,
($ in thousands)	**2020**	**2019**	**2020**	**2019**	**2020 vs. 2019**	**2020 vs. 2019**
Net interest income	$ 33,291	$ 21,184	$ 84,495	$ 64,865	57 %	30 %
Noninterest income	138,246	123,466	407,858	368,410	12 %	11 %
Noninterest expense	126,594	106,583	389,075	336,394	19 %	16 %
Income before provision for income taxes	44,943	38,067	103,278	96,881	18 %	7 %
Provision for income taxes	13,054	11,177	27,356	27,091	17 %	1 %
Net income	$ 31,889	$ 26,890	$ 75,922	$ 69,790	19 %	9 %

Net interest income for Wealth Management was $33.3 million and $84.5 million for the quarter and nine months ended September 30, 2020, compared to $21.2 million and $64.9 million for the quarter and nine months ended September 30, 2019, respectively. Net interest income is earned from Wealth Management client deposits with the Bank, for which Wealth Management earns a deposit earnings credit and fees 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 for the quarter and nine months primarily as a result of growth in Wealth Management client deposits, including sweep deposit accounts.

Wealth Management client deposits totaled $14.8 billion and $8.6 billion at September 30, 2020 and 2019, respectively, including sweep deposits. Wealth Management client deposits, including sweep accounts, averaged $12.9 billion and $8.4 billion for the third quarter of 2020 and 2019, respectively, and averaged $11.0 billion and $8.1 billion for the nine months ended September 30, 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% for the third quarter of 2020, compared to 1.01% for the third quarter of 2019, and 1.02% for the nine months ended September 30, 2020, compared to 1.07% for the nine months ended September 30, 2019.

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 2.71% and 2.80% for the third quarter of 2020 and 2019, respectively, and was 2.72% and 2.87% for the nine months ended September 30, 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 $87.8 million and $59.0 million for the third quarter of 2020 and 2019, respectively, and $224.5 million and $174.4 million for the nine months ended September 30, 2020 and 2019, respectively.

Noninterest income for Wealth Management was $138.2 million and $407.9 million for the quarter and nine months ended September 30, 2020, compared to $123.5 million and $368.4 million for the quarter and nine months ended September 30, 2019, respectively. The increase for the quarter was primarily due to an increase in investment management fees. The increase for the nine months was primarily due to higher investment management fees, brokerage and investment fees and foreign exchange fee income. 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 $126.6 million and $389.1 million for the quarter and nine months ended September 30, 2020, compared to $106.6 million and $336.4 million for the quarter and nine months ended September 30, 2019, respectively. The increases were 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 and capabilities in all markets to grow this segment.

Provision for income taxes for Wealth Management for the quarter and nine months ended September 30, 2020 was $13.1 million and $27.4 million, compared to $11.2 million and $27.1 million for the quarter and nine months ended September 30, 2019, respectively. The increase for the quarter was primarily the result of higher pre-tax income.

AUM and AUA, in aggregate, were $168.2 billion at September 30, 2020, compared to $140.2 billion a year ago, an increase of 20% driven by net client inflow and market appreciation. 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)	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
First Republic Investment Management	$ 74,661	$ 68,124	$ 60,056	$ 66,029	$ 61,204
Brokerage and investment:					
Brokerage	76,769	70,178	60,189	68,807	63,053
Money market mutual funds	4,416	5,933	6,893	4,268	4,402
Total brokerage and investment	81,185	76,111	67,082	73,075	67,455
Trust Company:					
Trust	8,687	7,905	7,288	7,121	6,366
Custody	3,651	3,646	3,461	4,818	5,210
Total Trust Company	12,338	11,551	10,749	11,939	11,576
Total AUM and AUA	$ 168,184	$ 155,786	$ 137,887	$ 151,043	$ 140,235

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.

	Quarter Ended September 30,		Nine Months Ended September 30,	
($ in millions)	2020	2019	2020	2019
Beginning balance	$ 155,786	$ 137,631	$ 151,043	$ 126,213
Net client flow	4,600	309	12,290	(2,605)
Market appreciation	7,798	2,295	4,851	16,627
Ending balance	$ 168,184	$ 140,235	$ 168,184	$ 140,235

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

	% of AUM				
Investment Type	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
Equities	51 %	49 %	44 %	51 %	49 %
Fixed income	31	31	32	30	30
Alternative investments	10	10	12	11	12
Cash and cash equivalents	8	10	12	8	9
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 September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
First Republic Investment Management	0.54 %	0.55 %	0.56 %	0.56 %
Brokerage and investment:				
Brokerage	0.05 %	0.06 %	0.06 %	0.05 %
Money market mutual funds	0.11 %	0.32 %	0.18 %	0.35 %
Total brokerage and investment	0.05 %	0.08 %	0.07 %	0.06 %
Trust Company:				
Trust	0.17 %	0.20 %	0.19 %	0.20 %
Custody	0.10 %	0.07 %	0.10 %	0.08 %
Total Trust Company	0.15 %	0.14 %	0.16 %	0.15 %
Total	0.28 %	0.29 %	0.29 %	0.30 %

Balance Sheet Analysis

Investments

The following table presents the investment portfolio:

($ in thousands)	September 30, 2020	December 31, 2019
Debt securities available-for-sale:		
Agency residential MBS	$ 817,179	$ 370,326
Other residential MBS	23,026	4,240
Agency commercial MBS	823,524	860,153
Securities of U.S. states and political subdivisions—taxable	47,473	47,450
Total	$ 1,711,202	$ 1,282,169
Debt securities held-to-maturity:		
U.S. Government-sponsored agency securities	$ 50,000	$ 368,065
Agency residential MBS	1,695,377	2,224,252
Other residential MBS	13,983	—
Agency commercial MBS	2,760,528	3,296,724
Securities of U.S. states and political subdivisions:		
Tax-exempt municipal securities	11,559,458	10,483,668
Tax-exempt nonprofit debentures	115,042	138,140
Taxable municipal securities	710,956	612,704
Corporate debt securities	24,078	24,080
Total	16,929,422	17,147,633
Less: Allowance for credit losses	(5,716)	—
Debt securities held-to-maturity, net	$ 16,923,706	$ 17,147,633
Equity securities (fair value):		
Mutual funds and marketable equity securities	$ 20,478	$ 19,586

The total combined investment securities portfolio (consisting of available-for-sale, held-to-maturity and equity securities, excluding any ACL) represented 14% and 16% of total assets at September 30, 2020 and December 31, 2019, respectively.

The average duration of the available-for-sale portfolio was 3.1 and 3.5 years at September 30, 2020 and December 31, 2019, respectively. The average duration of the held-to-maturity portfolio was 8.9 and 8.3 years at September 30, 2020 and December 31, 2019, respectively.

At September 30, 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 $24.9 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

Beginning January 1, 2020, upon adoption of ASC 326, the Bank evaluates available-for-sale debt securities that experienced a decline in fair value below amortized cost for credit impairment. As of September 30, 2020, no ACL was recognized on available-for-sale debt securities.

In addition, beginning January 1, 2020, an ACL is recorded on 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. As of September 30, 2020, the allowance on held-to-maturity debt securities totaled $5.7 million and consisted primarily of the allowance on securities of U.S. states and political subdivisions (including tax-exempt municipal securities, tax-exempt nonprofit debentures and taxable municipal securities). The allowance on these securities is determined using a quantitative model that incorporates the security's characteristics, macroeconomic forecasts and historical loss rates to determine expected credit losses over the life of the securities. No ACL is recognized on held-to-maturity U.S. Government-sponsored agency securities, agency residential MBS and agency commercial MBS due to the explicit or implicit guarantee by the Federal Government.

For a complete description of the accounting policies for determining the Bank's ACL on debt securities, see Note 1 and Note 3 in "Item 1. Financial Statements."

Loan Portfolio

The following table presents the Bank's loan portfolio, ACL and loans held for sale. Beginning in April 2020, the Bank became a lender under the PPP.

($ in millions)	September 30, 2020	December 31, 2019 [1]
Residential real estate		
Single family (1-4 units)	$ 56,628	$ 47,986
Home equity lines of credit	2,432	2,501
Single family construction	739	762
Total residential real estate	59,799	51,249
Income property		
Multifamily (5+ units)	13,393	12,353
Commercial real estate	7,782	7,449
Multifamily/commercial construction	2,039	1,696
Total income property	23,214	21,498
Business		
Capital call lines of credit	6,204	5,571
Tax-exempt	3,277	3,042
Other business	2,982	3,034
PPP	2,091	—
Total business	14,554	11,647
Other		
Stock secured	2,312	1,898
Other secured	1,781	1,433
Unsecured	3,102	3,072
Total other	7,195	6,403
Total loans held for investment	104,762	90,797
Less: Allowance for credit losses	(605)	(496)
Loans, net	104,157	90,301
Loans held for sale	34	23
Total	$ 104,191	$ 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 September 30, 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]	$22,962	$11,106	$10,344	$5,614	$1,724	$540	$4,372	$56,662	54 %
Home equity lines of credit	1,004	407	466	279	58	9	209	2,432	2
Single family construction	244	127	247	35	18	7	61	739	1
Total residential real estate	24,210	11,640	11,057	5,928	1,800	556	4,642	59,833	57
Income property									
Multifamily (5+ units)	5,320	2,775	2,586	526	1,288	216	682	13,393	13
Commercial real estate	3,223	1,608	1,511	302	202	241	695	7,782	7
Multifamily/commercial construction	400	336	852	46	78	7	320	2,039	2
Total income property	8,943	4,719	4,949	874	1,568	464	1,697	23,214	22
Business									
Capital call lines of credit	2,394	1,532	465	596	11	—	1,206	6,204	6
Tax-exempt	937	632	836	385	233	2	252	3,277	3
Other business	1,219	582	486	123	210	15	347	2,982	3
PPP	1,060	281	375	106	82	19	168	2,091	2
Total business	5,610	3,027	2,162	1,210	536	36	1,973	14,554	14
Other									
Stock secured	447	281	457	184	86	103	754	2,312	2
Other secured	336	708	61	223	11	1	441	1,781	2
Unsecured	847	800	666	287	143	53	306	3,102	3
Total other	1,630	1,789	1,184	694	240	157	1,501	7,195	7
Total	$40,393	$21,175	$19,352	$8,706	$4,144	$1,213	$9,813	$104,796	100 %
% by location at September 30, 2020	39 %	20 %	19 %	8 %	4 %	1 %	9 %	100 %	
% by location at December 31, 2019	39 %	21 %	18 %	8 %	4 %	1 %	9 %	100 %	

[1] Includes loans held for sale.

At both September 30, 2020 and December 31, 2019, approximately 51% 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 September 30, 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]	$ 197	$ 2,181	$ 2,477	$ 142	$ 4,997	$ 40,903	$ 10,762	$ 56,662
Home equity lines of credit	2,426	5	—	—	2,431	—	1	2,432
Single family construction	38	—	—	—	38	—	701	739
Total residential real estate	2,661	2,186	2,477	142	7,466	40,903	11,464	59,833
Income property								
Multifamily (5+ units)	233	497	1,618	124	2,472	6,462	4,459	13,393
Commercial real estate	342	389	385	32	1,148	2,484	4,150	7,782
Multifamily/commercial construction	850	161	—	13	1,024	46	969	2,039
Total income property	1,425	1,047	2,003	169	4,644	8,992	9,578	23,214
Business								
Capital call lines of credit	5,062	713	—	—	5,775	—	429	6,204
Tax-exempt	93	208	—	—	301	261	2,715	3,277
Other business	1,086	166	10	8	1,270	162	1,550	2,982
PPP	—	—	—	—	—	—	2,091	2,091
Total business	6,241	1,087	10	8	7,346	423	6,785	14,554
Other								
Stock secured	878	812	—	598	2,288	—	24	2,312
Other secured	656	810	—	110	1,576	—	205	1,781
Unsecured	457	32	—	6	495	—	2,607	3,102
Total other	1,991	1,654	—	714	4,359	—	2,836	7,195
Total	$ 12,318	$ 5,974	$ 4,490	$ 1,033	$ 23,815	$ 50,318	$ 30,663	$ 104,796
% by rate type at September 30, 2020	12 %	6 %	4 %	1 %	23 %	48 %	29 %	100 %
% by rate type at December 31, 2019	11 %	7 %	6 %	1 %	25 %	50 %	25 %	100 %

[1] Includes loans held for sale.

At September 30, 2020, included in the hybrid-rate and fixed-rate loan portfolios are $3.5 billion, or 3% 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 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 FHLB 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 September 30, 2020, approximately $36.5 billion, or 65%, 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 September 30, 2020, loans of this type had a weighted average LTV of approximately 55%, based on appraised value at the time of origination, and had credit scores averaging 764 at origination. At September 30, 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:

	September 30, 2020	
($ in thousands)	Unpaid Principal Balance	% of Total
LTV at Origination		
Less than or equal to 60%	$ 30,685,300	54.3 %
Greater than 60% to 70%	17,088,061	30.3
Greater than 70% to 80%	8,230,900	14.6
Greater than 80%	437,377	0.8
Total	$ 56,441,638	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 769, and all of our home loans were underwritten using full documentation.

Home Equity Lines of Credit

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 CLTV basis, including the total HELOC commitment and any balance on a first residential mortgage. As of September 30, 2020, approximately 37% of HELOCs are in first lien position, and approximately 49% 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 HELOC, including both the unpaid principal balance and total commitment:

($ in thousands)	September 30, 2020 Unpaid Principal Balance	September 30, 2020 Total Commitment	September 30, 2020 % of Unpaid Principal Balance
CLTV at Origination			
Less than or equal to 60%	$ 1,557,212	$ 5,879,097	64.8 %
Greater than 60% to 70%	594,962	1,742,192	24.8
Greater than 70% to 80%	244,783	551,570	10.2
Greater than 80%	5,314	12,795	0.2
Total	$ 2,402,271	$ 8,185,654	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 and can be converted into a permanent mortgage loan once the property is occupied. At September 30, 2020 and December 31, 2019, the unpaid principal balance of single family construction loans was $743.1 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 September 30, 2020	Unpaid Principal Balance December 31, 2019 [(1)]
Multifamily (5+ units) [(2)]	$ 13,408,089	$ 12,380,190
Multifamily (5+ units)—interest-only [(2), (3)]	$ 5,774,393	$ 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 September 30, 2020, interest-only multifamily loans (excluding lines of credit) had a weighted average LTV of 50% 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:

	September 30, 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	$ 314,157	$ 629,751	2.3 %	$ 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.

At September 30, 2020, interest-only multifamily lines of credit had a weighted average LTV of 49% based on the appraised value at the time of origination.

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)	September 30, 2020	December 31, 2019 [(1)]
Commercial real estate	$ 7,789,740	$ 7,458,703
Commercial real estate—interest-only [(2)]	$ 2,624,737	$ 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 September 30, 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:

	September 30, 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	$ 358,067	$ 688,617	4.6 %	$ 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.

At September 30, 2020, interest-only commercial real estate lines of credit had a weighted average LTV of 47% based on the appraised value at the time of origination.

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 2.3% of our loan portfolio as of September 30, 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 and can be converted into a permanent mortgage loan once the property is occupied. At September 30, 2020 and December 31, 2019, the unpaid principal balance of multifamily/commercial construction loans was $2.1 billion and $1.7 billion, respectively.

Business

Business loans include capital call lines of credit, tax-exempt, other business and beginning in April 2020, PPP 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:

	September 30, 2020		December 31, 2019	
($ in thousands)	Amortized Cost	Total Commitment	Amortized Cost	Total Commitment
Private Equity/Venture Capital Funds	$ 6,361,985	$ 17,546,146	$ 5,730,335	$ 15,529,658
Schools/Non-profit Organizations	3,632,069	4,624,681	3,437,471	4,229,283
Investment Firms	347,481	1,198,520	467,295	988,643
Real Estate Related Entities	613,036	969,752	540,870	904,076
Professional Service Firms	181,202	454,035	188,794	438,278
Aviation/Marine	353,674	361,144	361,696	372,603
Vineyards/Wine	168,110	260,393	185,408	258,205
Clubs and Membership Organizations	146,840	229,116	147,104	235,096
Entertainment Industry	20,707	100,471	29,045	108,542
Other	638,010	1,100,683	558,798	893,431
Total excluding PPP	12,463,114	26,844,941	11,646,816	23,957,815
PPP	2,091,102	2,124,926	—	—
Total including PPP	$ 14,554,216	$ 28,969,867	$ 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					
	September 30, 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	$ 6,072,029	$ 17,249,223	35.2 %	$ 5,481,904	$ 15,275,057	35.9 %
Schools/Non-profit Organizations	438,648	1,429,129	30.7 %	296,089	1,085,330	27.3 %
Investment Firms	139,660	990,441	14.1 %	250,673	771,744	32.5 %
Real Estate Related Entities	276,520	631,733	43.8 %	245,720	607,478	40.4 %
Professional Service Firms	54,546	327,253	16.7 %	76,275	325,654	23.4 %
Vineyards/Wine	57,781	149,944	38.5 %	59,648	132,191	45.1 %
Clubs and Membership Organizations	19,018	101,065	18.8 %	31,923	119,638	26.7 %
Entertainment Industry	18,313	97,125	18.9 %	29,534	108,094	27.3 %
Aviation/Marine	4,409	11,138	39.6 %	933	11,139	8.4 %
Other	274,120	736,406	37.2 %	178,929	513,879	34.8 %
Total	$ 7,355,044	$ 21,723,457	33.9 %	$ 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 September 30, 2020, the unpaid principal balance and total commitment for capital call lines of credit was $6.0 billion and $17.3 billion, respectively, resulting in a utilization rate for these lines of credit of 35.0% at September 30, 2020.

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

	Term Loans	
	Unpaid Principal Balance	
($ in thousands)	September 30, 2020	December 31, 2019
Schools/Non-profit Organizations	$ 3,195,552	$ 3,143,953
Aviation/Marine	350,006	361,464
Real Estate Related Entities	338,019	296,598
Private Equity/Venture Capital Funds	296,923	254,601
Investment Firms	208,079	216,899
Clubs and Membership Organizations	128,051	115,458
Professional Service Firms	126,782	112,624
Vineyards/Wine	110,449	126,014
Entertainment Industry	3,346	448
Other	364,277	379,552
Total excluding PPP	5,121,484	5,007,611
PPP	2,124,926	—
Total including PPP	$ 7,246,410	$ 5,007,611

PPP Loans

Beginning in April 2020, the Bank became a lender under the PPP, which was established under the CARES Act and subsequently amended by the Flexibility Act to provide loans to small businesses impacted by COVID-19 for payroll costs and certain operating expenses. The loan terms are identical for all borrowers with a 1% interest rate, minimum 2-year maturity, and includes a deferral period of principal and interest payments. Interest accrues during the deferral period, and the loan may be repaid prior to maturity without prepayment penalty fees. The loans are fully guaranteed by the SBA and additionally may be purchased and forgiven by the SBA if the borrower uses the proceeds for eligible expenses in accordance with program requirements for forgiveness. The Bank recorded deferred fees, net of origination costs, of approximately $43.0 million related to PPP loans, which are being amortized into interest income over their contractual life (two years). For the nine months ended September 30, 2020, $9.1 million of the net fees were amortized to interest income, and the unamortized balance as of September 30, 2020 was $33.8 million. The amortization of these net deferred fees will be accelerated upon forgiveness and repayment of the loans. As of September 30, 2020, the unpaid principal balance of PPP loans was $2.1 billion.

Other

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

Stock Secured

At September 30, 2020 and December 31, 2019, the unpaid principal balance of stock secured loans was $2.3 billion and $1.9 billion, respectively. As of September 30, 2020, there were additional undisbursed commitments of $4.1 billion related to stock secured loans.

Other Secured

At September 30, 2020 and December 31, 2019, the unpaid principal balance of other secured loans was $1.8 billion and $1.4 billion, respectively. As of September 30, 2020, there were additional undisbursed commitments of $1.7 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 September 30, 2020, we had outstanding loans from the professional loan program of $1.6 billion and undisbursed commitments of $1.6 billion.

Unsecured

At both September 30, 2020 and December 31, 2019, the unpaid principal balance of unsecured loans was $3.1 billion. Unsecured loans include household debt refinance loans and personal line of credit loans, which are made primarily to refinance existing household debt and access additional financing at fixed interest rates. At September 30, 2020, the unpaid principal balance of such loans was $2.6 billion with additional undisbursed commitments of $46.2 million.

In addition, unsecured loans include unsecured lines of credit, which 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. As of September 30, 2020, the unpaid principal balance of unsecured lines of credit was $423.7 million with additional undisbursed commitments of $762.4 million.

Lines of Credit

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

	Utilization Percentage				
Lines of Credit by Type	**September 30, 2020**	**June 30, 2020**	**March 31, 2020**	**December 31, 2019 (1)**	**September 30, 2019 (1)**
Home equity lines of credit	28.9 %	28.9 %	32.6 %	30.3 %	31.0 %
Single family construction	51.5 %	53.1 %	54.4 %	52.2 %	51.1 %
Multifamily (5+ units)	50.0 %	47.8 %	48.7 %	46.9 %	47.3 %
Commercial real estate	52.2 %	50.9 %	54.3 %	53.0 %	56.0 %
Multifamily/commercial construction	55.0 %	53.6 %	49.9 %	52.9 %	50.8 %
Capital call lines of credit	35.0 %	35.6 %	44.2 %	35.4 %	37.1 %
Tax-exempt	46.7 %	39.4 %	29.5 %	31.4 %	27.5 %
Other business	26.7 %	30.3 %	34.3 %	34.1 %	32.1 %
Stock secured	35.8 %	32.8 %	34.6 %	37.2 %	35.5 %
Other secured	46.6 %	45.7 %	43.8 %	45.9 %	44.5 %
Unsecured	37.2 %	38.4 %	38.4 %	35.1 %	36.5 %

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

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 September 30, 2020, we have originated approximately $303 billion of loans, of which approximately $36 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 $12.2 billion for the third quarter of 2020, compared to $11.0 billion for the third quarter of 2019, an increase of 12%, and were $36.0 billion for the nine months ended September 30, 2020, compared to $26.7 billion for the nine months ended September 30, 2019, an increase of 35%. The increase for the quarter was primarily due to an increase in single family lending. The increase for the nine months was primarily due to increases in single family and business lending. In addition, for the nine months ended September 30, 2020, loan originations included $2.0 billion of PPP loans. 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 September 30, 2020	Quarter Ended September 30, 2019 [(1)]	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019 [(1)]
Residential real estate				
Single family (1-4 units)	$ 6,813,850	$ 4,872,598	$ 16,208,370	$ 11,129,819
Home equity lines of credit	432,443	359,154	1,285,688	1,067,881
Single family construction	186,833	175,361	415,313	455,061
Total residential real estate	7,433,126	5,407,113	17,909,371	12,652,761
Income property				
Multifamily (5+ units)	955,951	710,183	2,684,074	2,105,764
Commercial real estate	193,228	543,964	975,769	1,309,736
Multifamily/commercial construction	245,220	387,144	997,555	835,272
Total income property	1,394,399	1,641,291	4,657,398	4,250,772
Business				
Capital call lines of credit	1,803,907	2,337,530	5,594,483	5,463,704
Tax-exempt	328,711	48,125	612,784	234,470
Other business	243,788	428,533	1,777,824	1,108,712
PPP	—	—	1,981,797	—
Total business	2,376,406	2,814,188	9,966,888	6,806,886
Other				
Stock secured	685,250	443,691	1,797,226	1,119,145
Other secured	189,386	218,831	961,940	841,001
Unsecured	159,379	438,278	685,537	1,068,959
Total other	1,034,015	1,100,800	3,444,703	3,029,105
Total loans originated	$ 12,237,946	$ 10,963,392	$ 35,978,360	$ 26,739,524

(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 September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019 [(1)]	September 31, 2019 [(1)]
Single family (1-4 units)	58 %	53 %	57 %	56 %	58 %
Home equity lines of credit [(2)]	49 %	48 %	51 %	52 %	52 %
Single family construction	58 %	58 %	57 %	53 %	55 %
Multifamily (5+ units)	52 %	49 %	54 %	49 %	53 %
Commercial real estate	43 %	43 %	49 %	43 %	44 %
Multifamily/commercial construction	52 %	61 %	51 %	55 %	56 %

(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	**September 30, 2020**	**June 30, 2020**	**March 31, 2020**	**December 31, 2019**	**September 30, 2019**
Single family (1-4 units)	774	770	765	767	767
Home equity lines of credit	773	772	768	765	762

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	**September 30, 2020**	**June 30, 2020**	**March 31, 2020**	**December 31, 2019**	**September 30, 2019**
Purchase loans	42 %	20 %	31 %	28 %	37 %
Refinance loans	58	80	69	72	63
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	**September 30, 2020**	**June 30, 2020**	**March 31, 2020**	**December 31, 2019 (1)**	**September 30, 2019 (1)**
Single family (1-4 units) (2)	57 %	57 %	58 %	58 %	58 %
Home equity lines of credit (3)	50 %	51 %	51 %	51 %	52 %
Single family construction	56 %	57 %	57 %	57 %	57 %
Multifamily (5+ units) (2)	51 %	51 %	52 %	51 %	51 %
Commercial real estate	47 %	47 %	47 %	47 %	47 %
Multifamily/commercial construction	53 %	53 %	53 %	54 %	54 %

(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 (TDRs) 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. Loan modifications made to borrowers impacted by COVID-19 are not considered TDRs. See additional discussion in "—COVID-19 Loan Modifications" below.

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.

Nonaccrual and Other Information

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)	September 30, 2020	December 31, 2019 [(1)]
Nonaccrual loans:		
Residential real estate		
Single family (1-4 units)	$ 70,646	$ 59,013
Home equity lines of credit	23,839	11,158
Single family construction	8,071	—
Total residential real estate	102,556	70,171
Income property		
Commercial real estate	410	—
Multifamily/commercial construction	57,881	68,856
Total income property	58,291	68,856
Business		
Other business	1,582	2,721
Other		
Other secured	23	23
Unsecured	1,795	1,410
Total other	1,818	1,433
Total nonaccrual loans	164,247	143,181
Other real estate owned	—	—
Total nonperforming assets	$ 164,247	$ 143,181
Nonperforming assets to total assets	0.12 %	0.12 %
Restructured accruing loans	$ 11,378	$ 13,287
Accruing loans 90 days or more past due	$ 935	$ —

(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 September 30, 2020 and 2019.

Of the loans on nonaccrual status, $38.9 million were current at September 30, 2020, compared to $125.0 million at December 31, 2019. Nonaccrual loans at September 30, 2020 include one lending relationship totaling $77.1 million, consisting of single family, owner occupied 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.

COVID-19 Loan Modifications

As discussed in Note 1 in "Item 1. Financial Statements," loan modifications to assist borrowers who are experiencing financial difficulties as a result of COVID-19 generally include deferring scheduled principal and/or interest payments for six months. For certain loans, the maturity of the loan may also be extended to allow for monthly payments to remain the same as they were pre-modification. Interest continues to accrue during the deferral period, and the deferred payments may be included in the borrower's final payment as a balloon payment, reamortized over the remaining maturity of the loan, or repaid over the extended term utilizing the pre-modification monthly payments, subject to the borrower's loan terms. Loan modifications made to borrowers impacted by COVID-19 are predominantly not reported as nonaccrual. In addition, the deferrals may result in delayed delinquency status for borrowers who would otherwise be past due.

The unpaid principal balance of such loan modifications (which are not classified as TDRs) totaled $3.9 billion and were 3.7% of total loans as of September 30, 2020. The following table presents a summary of these loan modifications as of September 30, 2020:

	COVID-19 Loan Modifications (1), (2), (3), (4)				
($ in millions)	Unpaid Principal Balance	Deferred Interest (5)	LTV (6)	Average Loan Size	Number of Loans
Single family (1-4 units)	$ 1,780	$ 25	60 %	$ 1.0	1,788
Home equity lines of credit	71	1	57 %	$ 0.4	174
Single family construction	10	—	55 %	$ 1.4	7
Multifamily (5+ units)	548	7	52 %	$ 3.1	179
Commercial real estate	1,004	13	48 %	$ 3.7	275
Multifamily/commercial construction	68	2	41 %	$ 6.8	10
Capital call lines of credit	—	—	n/a	$ —	—
Tax-exempt	72	1	n/a	$ 17.9	4
Other business	176	2	n/a	$ 1.3	138
Stock secured	—	—	n/a	$ —	—
Other secured	5	—	n/a	$ 0.5	12
Unsecured (7)	131	—	n/a	$ 0.1	985
Total	$ 3,865	$ 51			3,572

(1) COVID-19 loan modifications are not classified as TDRs.

(2) Includes 936 loans totaling $297 million that have completed their deferral period, but for which a normal payment is not yet due.

(3) Includes 10 loans totaling $46 million that received additional relief beyond their initial modification period.

(4) Excludes 395 loans totaling $330 million that have completed their deferral period and returned to a normal payment schedule or are no longer outstanding.

(5) Represents interest payments not made during the deferral period through September 30, 2020.

(6) Weighted average LTVs for real estate secured loans are based on appraised value at the time of origination.

(7) Includes $130 million of household debt refinance loans.

Industry Information

The Bank does not have automobile loans or credit card loans, and does not lend to oil and gas companies, casinos, airlines or most other travel-related businesses. The Bank has limited exposure to the areas directly impacted by COVID-19, such as the retail, hotel and restaurant industries. The unpaid principal balance of these loans represented only 2.3% of total loans as of September 30, 2020. As of September 30, 2020, the Bank had modifications of these portfolios for $640 million, or 26% of such portfolios. The following table presents the unpaid principal balance, weighted average LTVs based on the appraised value at the time of origination, average loan size, number of loans, and personal guarantee percentage for loans to borrowers in retail, hotel and restaurant industries:

	September 30, 2020				
($ in millions)	Unpaid Principal Balance	LTV	Average Loan Size	Number of Loans	Personal Guarantee %
Retail	$ 1,774	49 %	$ 2.7	682	76 %
Hotel	430	48 %	$ 6.8	65	74 %
Restaurant [1]	231	51 %	$ 1.1	215	94 %
Total [2]	$ 2,435			962	

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

[2] Amounts in the table above exclude $43 million of loans for hotels and $135 million of loans for restaurants under the PPP.

Allowance for Credit Losses on Loans

Beginning January 1, 2020, upon adoption of ASC 326, the Bank estimates its ACL on loans 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.

For a complete description of the accounting policies for determining the Bank's ACL on loans, see Note 1 and Note 4 in "Item 1. Financial Statements."

The following table presents an analysis of our ACL on loans, including provisions for credit losses, charge-offs and recoveries, as well as net charge-offs and allowance ratios:

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019 [1]**	**2020**	**2019 [1]**
Allowance for credit losses on loans:				
Balance at beginning of period [2]	$ 583,997	$ 473,095	$ 494,429	$ 439,048
Provision	22,437	16,711	113,305	52,111
Charge-offs:				
Single family (1-4 units)	(1,639)	(961)	(1,728)	(992)
Home equity lines of credit	(97)	—	(381)	—
Single family construction	—	—	(679)	—
Multifamily (5+ units)	—	—	—	—
Commercial real estate	—	—	—	—
Multifamily/commercial construction	—	—	—	—
Capital call lines of credit	—	—	—	—
Tax-exempt	—	—	—	—
Other business	—	(3,329)	(7)	(3,329)
PPP	—	—	—	—
Stock secured	—	—	—	—
Other secured	—	—	—	(1,229)
Unsecured	(26)	(331)	(909)	(861)
Total charge-offs	(1,762)	(4,621)	(3,704)	(6,411)
Recoveries:				
Single family (1-4 units)	6	35	44	217
Home equity lines of credit	12	25	444	100
Multifamily (5+ units)	—	—	—	—
Commercial real estate	—	—	—	—
Single family construction	—	—	—	—
Multifamily/commercial construction	—	—	—	—
Capital call lines of credit	—	—	—	—
Tax-exempt	—	—	—	—
Other business	31	17	85	46
PPP	—	—	—	—
Stock secured	—	—	—	—
Other secured	—	—	—	—
Unsecured	26	203	144	354
Total recoveries	75	280	717	717
Net loan charge-offs	(1,687)	(4,341)	(2,987)	(5,694)
Balance at end of period	$ 604,747	$ 485,465	$ 604,747	$ 485,465
Average total loans for the period	$ 102,250,593	$ 83,951,137	$ 97,521,668	$ 80,024,466
Total loans at period end	$ 104,761,651	$ 86,304,810	$ 104,761,651	$ 86,304,810
Total nonaccrual loans	$ 164,247	$ 136,928	$ 164,247	$ 136,928
Ratios:				
Net charge-offs to:				
Average total loans (annualized)	0.01 %	0.02 %	0.00 %	0.01 %
Allowance for credit losses on loans to:				
Total loans	0.58 %	0.56 %	0.58 %	0.56 %
Nonaccrual loans	368.2 %	354.5 %	368.2 %	354.5 %

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

(2) For the nine months ended September 30, 2020, the beginning balance represents the ACL on loans after the transition adjustments from the adoption of CECL.

Allowance for Credit Losses on Unfunded Loan Commitments

The Bank also records an ACL on unfunded loan commitments, which is based on the same assumptions as funded loans and also considers the probability of funding. Beginning January 1, 2020, upon adoption of ASC 326, the loss rate represents expected credit losses over the life of the loans.

For a complete description of the accounting policies for determining the Bank's ACL on unfunded loan commitments, see Note 1 and Note 4 in "Item 1. Financial Statements."

The following table presents the changes in the ACL on unfunded loan commitments:

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	2020	2019	2020	2019
Balance at beginning of period [1]	$ 17,602	$ 13,000	$ 15,697	$ 13,217
Provision [2]	5,768	478	7,673	261
Charge-offs	—	—	—	—
Recoveries	—	—	—	—
Balance at end of period	$ 23,370	$ 13,478	$ 23,370	$ 13,478

[1] For the nine months ended September 30, 2020, the beginning balance represents the ACL on unfunded loan commitments after the transition adjustments from the adoption of CECL.

[2] The provision for unfunded loan commitments is included in the provision for credit losses for 2020 periods. For 2019 periods, the provision for unfunded loan commitments is included in other noninterest expense.

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 September 30,		Nine Months Ended September 30,	
($ in thousands)	2020	2019	2020	2019
Single family loans originated	$ 6,813,850	$ 4,872,598	$ 16,208,370	$ 11,129,819
Loans sold:				
Flow sales:				
Agency	$ 44,118	$ 25,214	$ 80,702	$ 51,426
Non-agency	—	11,932	31,870	43,266
Total flow sales	44,118	37,146	112,572	94,692
Bulk sales:				
Non-agency	235,732	—	673,401	152,119
Securitizations	—	—	300,116	—
Total loans sold	$ 279,850	$ 37,146	$ 1,086,089	$ 246,811
Gain on sale of loans:				
Amount [1]	$ 13,797	$ 122	$ 14,575	$ 466
Gain as a percentage of loans sold [1]	4.93 %	0.33 %	1.34 %	0.19 %

[1] The gain for the quarter and nine months ended September 30, 2020 included $10.3 million related to realized discounts on previously purchased loans when these loans were sold. Excluding these discounts of $10.3 million, the gain as a percentage of loans sold was 1.24% and 0.39% for the quarter and nine months ended September 30, 2020, respectively.

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 ALM strategies. The gain on sale of loans for the quarter and nine months ended September 30, 2020 included $10.3 million related to realized discounts on previously purchased loans when these loans were sold. In addition, the increases in gain on sale of loans were the result of a higher volume of loans sold and higher margins. For the nine months ended September 30, 2020, the increase was partially offset by costs associated with our first sponsored securitization since 2002. 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 September 30, 2020, the Bank has an obligation to reimburse the 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 September 30, 2020, the weighted average LTV of those loans was 55% based on the appraised value at the time of origination. The liability for estimated losses related to this reimbursement obligation was less than $100,000 at September 30, 2020, and the Bank has experienced no cumulative losses on the loans within this securitization through September 30, 2020. The remaining unpaid principal balance of multifamily loans securitized was $108.2 million at September 30, 2020, compared to $173.1 million at December 31, 2019 and $251.9 million at the time of securitization in 2018.

During the nine months ended September 30, 2020, the Bank sold $300.1 million of originated single family loans through a securitization. These loans are included in the Bank's servicing portfolio, since the Bank performs servicing of the loans. The Bank retained a 5% interest in the investment securities issued in the securitization, which consist of senior and subordinated tranches and an interest-only strip. The carrying value of the retained securities as of September 30, 2020 was $14.6 million. The remaining unpaid principal balance of single family loans securitized was $280.6 million at September 30, 2020.

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

	At or for the Quarter Ended September 30,		At or for the Nine Months Ended September 30,	
($ in thousands)	**2020**	**2019**	**2020**	**2019**
Loans serviced for others	$ 7,799,040	$ 10,079,610	$ 7,799,040	$ 10,079,610
Loan servicing fees, net	$ 144	$ 2,347	$ (2,649)	$ 9,560

Mortgage loans serviced for investors decreased to $7.8 billion at September 30, 2020, from $10.1 billion at September 30, 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 September 30, 2020, MSRs were $28.4 million (36 bps of loans serviced), compared to $45.7 million (45 bps of loans serviced) at September 30, 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 September 30, 2020, single family loans serviced for investors that are 90 days or more past due were $8.4 million, or 11 bps of such loans serviced.

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 September 30, 2020, modifications in our mortgage servicing portfolio totaled $260.5 million. 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.

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 September 30, 2020, our total deposits were $104.4 billion, a 16% 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 $98.9 billion and $81.4 billion at September 30, 2020 and December 31, 2019, respectively, and represented 95% of total deposits at September 30, 2020, compared to 90% at December 31, 2019. At September 30, 2020, total deposits included $659.2 million of brokered deposits, compared to $2.9 billion at December 31, 2019. At September 30, 2020 and December 31, 2019, brokered deposits primarily consist of brokered CDs. The weighted average contractual rate paid on brokered CDs was 0.23% and 1.89% at September 30, 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)	September 30, 2020	December 31, 2019
Preferred Banking:		
Northern California	$ 27,282,289	$ 23,110,274
Metropolitan New York	16,733,091	14,432,673
Southern California	9,136,893	6,972,677
Boston	8,858,120	7,213,012
Subtotal	62,010,393	51,728,636
Preferred Banking Offices:		
Northern California	18,759,920	16,710,704
Metropolitan New York	6,354,062	5,179,643
Southern California	4,780,598	4,170,492
Boston	2,021,466	1,752,376
Subtotal	31,916,046	27,813,215
Wealth management sweep	9,186,257	5,579,478
Other	1,290,680	5,011,917
Total deposits	$ 104,403,376	$ 90,133,246

The following table presents business and consumer deposits:

($ in thousands)	September 30, 2020	December 31, 2019
Business deposits:		
Checking	$ 46,594,259	$ 36,383,549
Money market checking	8,423,186	7,930,337
Money market savings	4,190,251	4,585,428
CDs	1,733,703	2,014,152
Subtotal	60,941,399	50,913,466
Percent of total deposits	58 %	56 %
Consumer deposits:		
Checking	21,025,606	16,437,575
Money market checking	7,445,583	4,860,370
Money market savings and passbooks	7,229,038	6,000,927
CDs	7,761,750	11,920,908
Subtotal	43,461,977	39,219,780
Percent of total deposits	42 %	44 %
Total deposits	$104,403,376	$ 90,133,246

We fund a portion of our assets with CDs that have balances greater than $250,000. At September 30, 2020 and December 31, 2019, our CDs having balances greater than $250,000 totaled $4.8 billion and $5.8 billion, respectively. The following table presents the maturities of our CDs greater than $250,000:

($ in thousands)	September 30, 2020
Remaining maturity:	
Three months or less	$ 1,772,943
Over three through six months	1,467,561
Over six through twelve months	1,230,073
Over twelve months	351,684
Total	$ 4,822,261
Percent of total deposits	5 %

At September 30, 2020 and December 31, 2019, the weighted average contractual rate paid on CDs was 0.73% and 1.94%, respectively, and the weighted average remaining maturity of CDs was 6.5 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:

	September 30, 2020	
($ in thousands)	Amount	Rate
CDs maturing in:		
October 1 - December 31, 2020	$ 3,301,652	0.78 %
2021	5,366,842	0.57 %
2022	497,080	1.17 %
2023	114,639	2.06 %
2024	136,316	2.55 %
2025 and thereafter	78,924	1.74 %
Total	$ 9,495,453	0.73 %

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 September 30, 2020, we had short-term borrowings of $5.0 million, which consisted entirely of short-term FHLB advances, and had a 0% interest rate under a limited COVID-19 relief program offered by the FHLB to support bank lending. The level of short-term borrowings varies based on funding needs.

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 September 30, 2020 were $13.5 billion. The weighted average remaining maturity of long-term FHLB advances was 1.4 years at September 30, 2020. The following table presents the contractual maturities and weighted average contractual rates of our long-term FHLB advances:

($ in thousands)	September 30, 2020 Amount	Rate
FHLB advances maturing in:		
October 1 - December 31, 2020	$ 100,000	2.56 %
2021	8,305,000	1.72 %
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	$ 13,505,000	1.60 %

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 September 30, 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.

	September 30, 2020			
($ in thousands)	Carrying Value (1)	Rate	Optional Redemption Date (2)	Maturity Date (3)
Senior notes:				
Fixed-rate, issued June 2017	$ 498,407	2.500 %	May 6, 2022	June 6, 2022
Fixed-to-floating rate, issued February 2020	$ 497,219	1.912% (4)	February 12, 2023	February 12, 2024
Subordinated notes:				
Fixed-rate, issued August 2016	$ 388,218	4.375 %	February 1, 2046	August 1, 2046
Fixed-rate, issued February 2017	$ 389,986	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 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 September 30, 2020 was $30.5 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 September 30, 2020, our investment securities portfolio of $18.7 billion and cash and cash equivalents of $3.7 billion collectively comprised 17% of total assets. At September 30, 2020, assets that are considered HQLA, including eligible cash, were $17.1 billion. HQLA include $7.9 billion of municipal securities. Effective in March 2020, the Federal Reserve eliminated the reserve requirement, which has resulted in an increase in HQLA eligible cash.

At September 30, 2020, we had $30.5 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 26% of total assets.

We generally use short-term borrowings, such as federal funds purchased and short-term FHLB advances, 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 $1.1 billion of loans during the nine months ended September 30, 2020, which included $300.1 million of originated single family loans sold through a securitization.

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, ALM 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 nine months ended September 30, 2020, the primary sources and uses of funds were as follows:

- Loan originations and purchases, net of sales and repayments, were $14.6 billion;
- Deposits increased by $14.3 billion;
- FHLB advances increased by $960.0 million;
- Federal funds purchased decreased by $450.0 million;
- 2,500,000 new shares of common stock were issued in an underwritten public offering, with net proceeds of $290.6 million;
- 1.912% unsecured senior fixed-to-floating rate notes were issued, with net proceeds of $496.5 million; and
- 4.125% Noncumulative Perpetual Series K Preferred Stock were issued, with net proceeds of approximately $492.0 million.

Capital Resources

Effective beginning the first quarter of 2020, the Bank elected to adopt the regulatory capital relief from the impact of COVID-19 and application of the CECL methodology under ASC 326 ("CECL Capital Rule"). The CECL Capital Rule allows the Bank to delay the estimated impact of CECL on its regulatory capital over a five-year transition period ending December 31, 2024.

During the second quarter of 2020, the regulatory capital simplifications rule ("Simplifications Rule") that was issued in July 2019 became effective. The Simplifications Rule requires the Bank to assign a 250% risk weight to MSRs or temporary difference DTAs not deducted from CET1 capital.

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

($ in thousands)	September 30, 2020	December 31, 2019
Regulatory Capital Components		
Shareholders' equity	$ 11,344,609	$ 9,851,107
CECL Capital Rule retained earnings adjustments [1]	34,436	—
CET1 capital adjustments and deductions:		
Preferred stock	(1,645,000)	(1,145,000)
Goodwill and other intangible assets, net of deferred taxes	(206,958)	(216,742)
DTAs that arise from net operating loss and tax credit carryforwards, net of deferred tax liabilities	(127,240)	(113,042)
Accumulated other comprehensive income	(24,159)	(5,131)
CET1 capital	9,375,688	8,371,192
Preferred stock	1,645,000	1,145,000
Additional Tier 1 capital	1,645,000	1,145,000
Tier 1 capital	11,020,688	9,516,192
Tier 2 capital instruments—subordinated notes [2]	778,204	777,885
Qualifying allowance for credit losses [3]	633,833	508,132
CECL Capital Rule allowance for credit losses adjustments [1]	(36,421)	—
Tier 2 capital	1,375,616	1,286,017
Total risk-based capital	$ 12,396,304	$ 10,802,209
Assets [4]		
Average assets	$ 131,483,009	$ 113,403,507
CECL Capital Rule average assets adjustments [1]	34,436	—
Average assets after adjustments	$ 131,517,445	$ 113,403,507
Risk-weighted assets	$ 95,828,348	$ 84,885,943
CECL Capital Rule DTAs adjustments [1]	(4,963)	—
Risk-weighted assets after adjustments	$ 95,823,385	$ 84,885,943

(1) In accordance with the CECL Capital 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 September 30, 2020 have been adjusted to exclude the following impacts attributed to the adoption of CECL: decreases in retained earnings, increases in ACL on loans, held-to-maturity debt securities and unfunded loan commitments, decreases in average assets, and increases in risk-weighted assets.

(2) Subordinated notes mature in 2046 and 2047.

(3) Includes the ACL on loans, held-to-maturity debt securities and unfunded loan commitments.

(4) As defined by regulatory capital rules.

At September 30, 2020 and December 31, 2019, the Bank's noncumulative perpetual preferred stock was 15% and 12% of Tier 1 capital, respectively.

During the nine months ended September 30, 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. In addition, the Bank issued $500.0 million of 4.125% Noncumulative Perpetual Series K Preferred Stock, which qualifies as Tier 1 capital.

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 September 30, 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	**September 30, 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)	8.38 %	8.39 %	5.00 %	4.00 %	— %
CET1 capital to risk-weighted assets	9.78 %	9.86 %	6.50 %	4.50 %	2.50 %
Tier 1 capital to risk-weighted assets	11.50 %	11.21 %	8.00 %	6.00 %	2.50 %
Total capital to risk-weighted assets	12.94 %	12.73 %	10.00 %	8.00 %	2.50 %

(1) As of September 30, 2020, the Bank's election of regulatory capital relief under the CECL Capital Rule resulted in an increase of 2 bps in the Tier 1 leverage ratio, an increase of 4 bps in the CET1 capital ratio and the Tier 1 capital ratio, and no impact on the total capital ratio.

(2) As of September 30, 2020, our capital conservation buffer was 4.94%, 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 is primarily driven by assets and liabilities that mature or reset at different times, on a different basis, in unequal amounts, or which may have different embedded optionality. The Bank's Board of Directors approves policies and limits governing the management of interest rate risk at least annually. Our 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 may manage interest rate risk by altering the mix of loans, such as adjustable-rate loans, hybrid ARMs, or fixed rate loans, which we originate or elect to retain. We may also change the composition and characteristics of our investment portfolio. We may also vary the degree, to which we utilize different funding sources, such as checking and savings accounts, CDs with various maturity terms, 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 $1.1 billion of loans during the nine months ended September 30, 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 the 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 $31.7 billion, or 25% of total earning assets at September 30, 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 $27.3 billion, or 26% of the total loan portfolio at September 30, 2020. The loan portfolio that reprices at least quarterly to market rate indices, such as Prime or LIBOR, totaled $18.2 billion, or 17% of the total loan portfolio at September 30, 2020. The loan portfolio with lagging indices, such as COFI and the CMT, totaled $5.5 billion, or 5% of the total loan portfolio at September 30, 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 $3.5 billion, or 3% of the total loan portfolio at September 30, 2020. In addition, at September 30, 2020, the Bank held $3.3 billion in cash and $1.1 billion in investment securities (collectively, 20% of total cash and investment securities), that reprice to market rates at least quarterly or are currently projected to be called or mature in less than one year.

Total checking deposits were $67.6 billion, or 65% of total deposits at September 30, 2020. Total checking deposits include both noninterest-bearing checking accounts and interest-bearing checking accounts, which currently pay a nominal rate of 1 bp, 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 $27.3 billion, or 26% of total deposits at September 30, 2020. CDs were $9.5 billion, or 9% of total deposits and had a weighted average remaining maturity of 6.5 months at September 30, 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 $13.5 billion at September 30, 2020 and had a weighted average remaining maturity of 1.4 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 September 30, 2020, the senior notes had a carrying value of $995.6 million and mature in June 2022 and February 2024. Also, at September 30, 2020, the subordinated notes had a carrying value of $778.2 million and mature in August 2046 and February 2047.

Net Interest Income Simulation

In addition to evaluating our current balance sheet, we also perform 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 September 30, 2020, are presented in the following table. The projections assume both (a) instantaneous parallel shifts upward of 100 and 200 bps and instantaneous parallel shifts downward of the yield curve of 100 bps 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 September 30, 2021**	**Twelve Months Ending September 30, 2022**
Shock:		
+200 bps immediately	2.1 %	9.8 %
+100 bps immediately	0.8 %	5.3 %
-100 bps immediately	(1.1)%	(3.4)%
Ramp:		
+200 bps over next 12 months	0.4 %	6.0 %
+100 bps over next 12 months	0.2 %	3.3 %
-100 bps over next 12 months	(0.4)%	(2.7)%

As of September 30, 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 remain at or below the current level of 65% of total deposits over the two-year horizon.

Excluding CDs, the remaining deposits include money market checking, money market savings and passbook accounts and are assumed to reprice with a modest lag by approximately 69% of short-term interest rate increases or 65% 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.

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 September 30, 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 September 30, 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 AUM or AUA. 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 ACL could change, resulting in significant changes in the ACL. 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 openings and hours in our preferred banking offices, social distancing and other measures to ensure the safety of our colleagues and clients. However, 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 future 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 third quarter of 2020, we sold 46,009 shares of common stock to eligible employees under our Employee Stock Purchase Plan for aggregate cash consideration of $4.4 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 third quarter of 2020, we granted 25,225 RSUs, net of forfeitures, that are time vesting. In addition, we granted 1,149,225 RSUs, net of forfeitures, and 309,250 PSUs 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 $159.6 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 third quarter of 2020, we sold 20,000,000 depositary shares, each representing a 1/40th interest in a share of the Bank's 4.125% Noncumulative Perpetual Series K Preferred Stock for aggregate cash consideration of $500.0 million. The aggregate underwriting discount was $6.7 million. Net proceeds, after underwriting discounts, were $493.3 million, which we used for general corporate purposes. The principal underwriters in the transaction were BofA Securities, Inc., J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, UBS Securities LLC and Wells Fargo Securities, 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 third quarter of 2020 or at any time since our inception on July 1, 2010.

On October 9, 2020 (the "Redemption Date"), we redeemed all outstanding depositary shares, each representing a 1/40th interest in the Bank's 5.70% Noncumulative Perpetual Series F Preferred Stock ("Series F Preferred Stock"). In total, 4,000,000 depositary shares were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $100.0 million plus all accrued and unpaid dividends as of the Redemption Date. As of the Redemption Date, the Series F Preferred Stock was deemed no longer outstanding, and no further dividends will be declared on the Series F Preferred Stock.

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
3.1	Certificate of Determination for the Bank's 4.125% Noncumulative Perpetual Series K Preferred Stock, par value $0.01 per share, incorporated by reference to Exhibit 3.1 of Form 8-K filed on September 16, 2020.
4.1	Deposit Agreement, dated September 16, 2020, by and among the Bank, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on September 16, 2020.
4.2	Form of Depositary Receipt (included in Exhibit 4.1).
10.1	Form of Performance Share Unit Agreement—Performance Vesting under the 2017 Omnibus Award Plan. (1), (2)
10.2	Form of Performance Share Unit Agreement—Performance 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)

(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

November 6, 2020	/s/ Michael J. Roffler
	Michael J. Roffler
	Executive Vice President and Chief Financial Officer
	(Principal Financial Officer)

FIRST REPUBLIC BANK
2017 OMNIBUS AWARD PLAN

FORM OF PERFORMANCE SHARE UNIT AGREEMENT

THIS PERFORMANCE SHARE 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 performance share unit awards may be granted with respect to Common Stock of Bank; and

WHEREAS, the Bank's Compensation Committee ("Committee") has determined that it is in the best interests of Bank and its shareholders to grant Participant a performance share unit award with respect to the target number of shares of Common Stock provided for herein.

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

1. Grant of Performance Share Units.

(a) Pursuant to Sections 8 and 9(a) of the Plan, Bank hereby grants to Participant an Award for a target number of ________ performance share units ("Target Award"). Each performance share unit ("PSU") represents the right to receive one share of Common Stock of Bank (each, a "Share") subject to the terms and conditions set forth in this Agreement and the Plan. The number of PSUs that Participant actually earns for the Restricted Period (up to the target number) will be determined by the level of achievement of the performance goals ("Performance Goals") as described in Section 2(a).

(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 PSUs.

2. Terms and Conditions.

(a) Restricted Period. The period of time between the Date of Grant and the vesting of PSUs (and the termination of restrictions thereon) will be referred to herein as the "Restricted Period." Except as may otherwise be provided herein, 100% of the PSUs shall become vested on the three-year anniversary of the Date of Grant, subject to both (i) the Committee's certification of Bank's achievement of the performance criteria shown in Appendix A, and (ii) Participant's continuous service as an employee, director, consultant or advisor to the Bank or its Affiliates ("Continuous Service") through such vesting date. Continuous Service for purposes of this agreement includes service as Chairman of the Board of Directors. 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 PSUs granted hereunder that have not vested on or prior to such termination of Continuous Service shall be forfeited by Participant. Except as may otherwise be provided herein, no additional RSUs vest after termination of Continuous Service for any reason.

(b) Termination of Continuous Service.

(i) General. Except as otherwise expressly provided in Sections 2(b)(ii), Section 2(b)(iii), Section 2(b)(iv), Section 2(b)(v) and Section 2(c)(i) below, if Participant's Continuous Service is terminated at any time during the Restricted Period (other than by reason of death, Disability, Retirement, and Involuntary Termination as set forth below), then Participant shall forfeit all outstanding, unvested PSUs, 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 PSUs or consideration therefor.

(ii) Disability. Notwithstanding Section 2(b)(i), if Participant's Continuous Service terminates during the Restricted Period because Participant becomes disabled with the meaning of that term under Section 409A(a)(2)(C) of the Code ("Disability" or "Disabled"), Participant will remain eligible to vest in the Target Award on the last day of the Restricted Period in accordance with this Section 2 as if Participant's Continuous Service had not been terminated, based on the level of achievement of the Performance Goals.

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

(iv) Retirement. Notwithstanding Section 2(b)(i), if Participant's Continuous Service is terminated during the Restricted Period as a result of Participant's career retirement with the mutual agreement of the Committee ("Retirement"), Participant will remain eligible to vest in the Target Award based on the level of achievement of the Performance Goals, and subject to Participant's compliance with the Employment Policies (as defined below) and the other provisions of Section 2(i).

(v) Involuntary Termination. Notwithstanding Section 2(c)(i):

A. if Participant's Continuous Service is terminated during the Restricted Period as a result of termination by Bank of Participant without "Cause" (as defined for purposes of this Agreement in that certain employment agreement between Participant and Bank, dated ______, as amended, supplemented or otherwise modified from time to time (the "Employment Agreement")), Participant will remain eligible to vest in the Target Award (without proration) on the last day of the Restricted Period in accordance with this Section 2 as if Participant's Continuous Service had not been terminated, based on the level of achievement of the Performance Goals; and

B. if Participant's Continuous Service is terminated during the Restricted Period as a result of Participant's resignation for "Good Reason" (as defined for purposes of this Agreement or in the Employment Agreement), Participant will remain eligible to vest in the Target Award (without proration) on the last day of the Restricted Period in accordance with this Section 2 as if Participant's Continuous Service had not terminated, based on the level of achievement of the Performance Goals.

(vi) Extended Term. Notwithstanding Section 2(c)(i), if Participant's Continuous Service is terminated during the Restricted Period and on or after the commencement of the Extended Term (as defined in the Employment Agreement) as a result of Participant's resignation because Participant is not elected to the Board by shareholders of Bank or is not appointed as Executive Chairman, Participant will remain eligible to vest in the Target Award (without proration) on the last day of the Restricted Period in accordance with this Section 2 as if Participant's Continuous Service had not terminated, based on the level of achievement of the Performance Goals.

(c) Impact of a Change In Control on PSUs.

(i) Substitution or Assumption by Successor. Upon a "Change in Control" (as defined for purposes of this Agreement or in the Employment Agreement) in which this Award is assumed, continued, replaced or substituted with an equivalent value award, the Award (including any replacement or substitute award) will convert to a non-performance based award and will vest on the last day of the Restricted Period in accordance with this Section 2 subject only to Continuous Service through such date (except as otherwise expressly provided in this Agreement), provided that the Target Award will be adjusted to the number of PSUs that would have been earned for the full Restricted Period (without proration) if the Performance Goals had been achieved as follows:

A. If the Change in Control occurs within the first 18 months of the Restricted Period, the number of PSUs will be determined as if the Performance Goals had been achieved at their respective target levels without regard to actual performance; and

B. If the Change in Control occurs after the first 18 months of the Restricted Period, the number of PSUs will be determined based on actual performance through the calendar quarter ending immediately prior to the Change in Control.

Notwithstanding the preceding provisions of this Section 2(c)(i), if Participant's Continuous Service is terminated during the Restricted Period within 24 months following the Change in Control as a result of termination by Bank of Participant without Cause or Participant's resignation for Good Reason, the vesting of all of the outstanding PSUs subject to the Target Award (as adjusted pursuant to the immediately preceding clauses (A) and (B)) will accelerate in full upon such termination.

For the sake of clarification, if Participant's Continuous Service is terminated during the Restricted Period but more than 24 months following the Change in Control as a result of termination by Bank of Participant without Cause or Participant's resignation for Good Reason, the provisions of Section 2(b)(v) shall apply with respect to the Target Award (without regard to actual performance but as adjusted pursuant to the immediately preceding clauses (A) and (B)). In addition, if Participant's Continuous Service is terminated during the Restricted Period following the Change in Control as a result of Participant's death, or Participant becomes Disabled during the Restricted Period following the Change in Control, the provisions of Sections 2(b)(ii)-(iii) shall apply with respect to the Target Award (as adjusted pursuant to the immediately preceding clauses (A) and (B)). If Participant's Continuous Service is terminated during the Restricted Period following the Change in Control as a result of Participant's Retirement, the provisions of Section 2(b)(iv) shall apply with respect to the Target Award (as adjusted pursuant to the immediately preceding clauses (A) and (B), without proration), provided that if Retirement is within 24 months following the Change in Control, the PSUs shall be subject to settlement upon Participant's Retirement rather than on the last day of the Restricted Period to the extent required by and subject to the conditions of Section 409A of the Code.

(ii) <u>No Substitution or Assumption by Successor</u>. The Performance Goals will be deemed to be met (and the number of PSUs earned) at the target level of performance (or, if higher, the actual level of performance through the Change in Control date), and the vesting of the PSUs shall be accelerated in full, upon any Change in Control in which the Award is not continued, assumed, substituted or replaced with equivalent value awards pursuant to the terms of the Plan.

(d) <u>Settlement of PSUs</u>. As soon as practicable after vesting, each outstanding PSU will be settled through the delivery by Bank of one share of Bank Common Stock and any dividend equivalents credited with respect to such PSU, subject to compliance with Section 3(g) and the requirements of Section 409A of the Code. 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 PSUs.

(e) Dividend Equivalents. If a cash dividend is paid with respect to the Common Stock of Bank, Bank will credit to Participant, as of the payment date for such dividend, an amount equal to the number of PSUs subject to the Target Award as of the related dividend payment record date multiplied by the amount that would have been paid as a dividend on each outstanding Share at such payment date. Any amounts credited under this Section 2(g) shall be subject to the same restrictions and conditions that apply to the PSU with respect to which the amounts are credited and will be payable when the underlying PSU becomes payable. At the time the underlying PSU becomes payable, Bank has the discretion to pay any accrued dividend equivalents either in cash or in Shares. If the underlying PSU does not vest or is forfeited, any amounts credited under this Section 2(g) with respect to the underlying PSU will also fail to vest and be forfeited. 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 PSUs which, as of the record date, have been paid or terminated.

(f) Transferability. Unless otherwise permitted by the Committee pursuant to Section 13(c) of the Plan, the PSUs 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.

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

(h) Withholding Taxes. To the extent that the vesting of the PSUs 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 PSUs 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 PSUs. 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 PSUs, 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 PSUs 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.

(i) Compliance with Employment Policies. Notwithstanding anything to the contrary contained herein, Participant agrees that his or her entitlement to retain any PSUs 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 PSUs, shall be conditioned on Participant's compliance with the covenants and other obligations 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 PSU, 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 PSUs upon Participant's written certification of his or her compliance with the Employment Policies and the other provisions of this Section 2(i).

(j) Recoupment. In the event of a material restatement of Bank's financial results, the Board has authority to seek reimbursement of any portion of the Award that is greater than would have been awarded if calculated based on the restated financial results. In addition, any recoupment or "clawback" policies adopted by the Committee pursuant to Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law shall apply to this Award and any Shares that may be issued pursuant hereto to the extent the Committee provides at the time the policy is adopted.

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. Nothing in the Plan or in this Agreement shall confer upon Participant any right to continue in the service of Bank or the Affiliates or shall interfere with or restrict in any way the right of Bank or the Affiliates, which are hereby expressly reserved, to remove, terminate or discharge Participant at any time for any reason whatsoever, subject to the Employment Agreement between Participant and Bank, as amended.

(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) Invalid Provision. The invalidity or unenforceability of any particular provision hereof shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision had been omitted.

(f) 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. The consent of Participant (or other holder of the PSUs) shall be required for any modification of the PSU or termination of the PSU pursuant to Sections 10, 12, 13(j)(ii) and 13(u) of the Plan, subject to the remainder of this Section 3(f). The consent of Participant (or other holder of the PSUs) shall not be required for any cancellation of the PSU pursuant to Section 10 or Section 11 of the Plan if (1) the cancellation of the PSU is in exchange for payment of the value of the PSU pursuant to clause (iii) of Section 10 or Section 11 of the Plan, (2) such cancellation and payment occurs immediately prior to or upon a Change in Control as defined in Section 6(e)(4)(C) of the Employment Agreement pursuant to which some or all of the common stock of the Bank is exchanged for cash, (3) payment is made with respect to all of Participant's cancelled PSUs, whether or not vested, (4) the amount of the PSU cancelled immediately prior to or upon a Change in Control in accordance with this sentence does not exceed the percentage of the PSU that represents the percentage of common stock of Bank that is exchanged for cash pursuant to such Change in Control and (5) all other vested outstanding PSUs under the Plan are cancelled pursuant to clause (iii) of Section 10 or Section 11 of the Plan in at least the same proportion as described in the immediately preceding clause (4). The consent of Participant (or other holder of the PSUs) shall not be required for any equitable or proportionate adjustment required pursuant to Section 10 to preserve the value of the PSUs under an "equity restructuring" within the meaning of Financial Accounting Standards Board Accounting Standards Codification Topic 718. If a Change in Control as defined in Section 6(e)(4)(C) of the Employment Agreement occurs, the consent of Participant (or other holder of the PSUs) shall not be required for either (1) a continuation, replacement, substitution or assumption of the PSUs that preserves the value of the PSUs, or (2) an acceleration of the lapse of restrictions on the PSUs, in each case pursuant to clause (ii) of Section 10 or Section 11 of the Plan. For purposes of the preceding sentence, a PSU will be considered substituted or assumed if, following the Change in Control, the PSU confers the right to receive, for each PSU Share, common equity of the relevant successor entity or any parent company thereof equal in fair market value to the per share consideration received by holders of common stock of Bank in the Change in Control (and of the same class or series of equity securities as received by such holders). Participant acknowledges that the Committee may effect any replacement, substitution or assumption permitted pursuant to this Section 3(f) in a manner that changes the kind of securities which may be delivered in respect of the PSUs, and, by way of example and without limitation, if a public company were to acquire Bank in a Change in Control as defined in Section 6(e)(4)(C) of the Employment Agreement which results in Bank shareholders getting public company stock and Bank continuing as a subsidiary of such public company, restricted stock unit awards in respect of shares of stock of the public company acquirer may be substituted for the PSUs in a manner consistent with this Section 3(f).

(g) 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 PSUs 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. If the settlement of the Award is due on a termination of Continuous Service, such term shall be interpreted to mean a "separation from service" within the meaning of Section 409A(a)(2)(A)(i) of the Code ("Separation from Service") that qualifies as a permitted payment event under Section 409A to the extent the Award is or has become subject to Section 409A. In addition, if the settlement of the Award is due upon a termination of Continuous Service that occurs within 24 months following a Change in Control, settlement will be accelerated from the date on which it would otherwise have been made only if the Change in Control also constitutes a change in the ownership or effective control of Bank, or in the ownership of a substantial portion of the assets of Bank, within the meaning of regulations issued under Section 409A(a)(2)(a)(v) of the Code, to the extent the Award is or has become subject to Section 409A. 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 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).

(h) Code Section 162(m). All payments under this Award are intended to constitute "qualified performance-based compensation" within the meaning of Section 162(m) of the Code. This Award shall be construed and administered in a manner consistent with such intent.

(i) Severability. If any provision of this Agreement 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.

(j) Entire Agreement. This Agreement and the Plan, including all 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.

(k) Governing Law. This Agreement and the rights and obligations of Participant hereunder shall be construed and determined in accordance with the laws of the State of California.

(l) 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.

(m) 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 has been executed and delivered by the parties hereto on the first date set forth above.

First Republic Bank

By: __________________________________

Appendix A

Performance Criteria

FIRST REPUBLIC BANK

2017 OMNIBUS AWARD PLAN

FORM OF PERFORMANCE SHARE UNIT AGREEMENT

THIS PERFORMANCE SHARE 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 performance share unit awards may be granted with respect to Common Stock of Bank;

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

WHEREAS, Bank's grant of performance share units is conditioned on Participant's agreeing to the Restrictive Covenants attached as Appendix A (which is an integral part of this Agreement) (the "Restrictive Covenants").

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

1. Grant of Performance Share Units.

(a) Pursuant to Sections 8 and 9(a) of the Plan, Bank hereby grants to Participant an Award for a target number of ________ performance share units ("Target Award"). Each performance share unit ("PSU") represents the right to receive one share of Common Stock of Bank (each, a "Share") subject to the terms and conditions set forth in this Agreement and the Plan. The number of PSUs that Participant actually earns for the Restricted Period (up to the target number) will be determined by the level of achievement of the performance goals as described in section 2(a).

(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 PSUs.

(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 PSUs 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 PSUs 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 PSU, 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 PSUs 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 PSUs (and the termination of restrictions thereon) will be referred to herein as the "Restricted Period." Except as may otherwise be provided herein, the PSUs shall become vested on the three-year anniversary of the Date of Grant, subject to both (i) the Committee's certification of Bank's achievement of the performance criteria shown in Appendix B, and (ii) 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 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 PSUs 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 PSUs.

(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 performance conditions described in Section 2(a) will be deemed to be met in full, and the Award (including any substitute or replacement award) will convert to a non-performance based award (without proration) and 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 performance conditions described in Section 2(a) will be deemed to be met in full, and the vesting of the PSUs shall be accelerated upon any Change in Control, as defined in the Plan, in which the PSUs are not substituted, assumed, replaced or continued by a successor pursuant to the terms of the Plan.

(c) Treatment of PSUs 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 PSUs for any reason (other than by reason of death or Disability as set forth below), then Participant shall forfeit all outstanding, unvested PSUs, 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 PSUs 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 PSUs 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) Disability. Notwithstanding Section 2(c)(i) above, if Participant's Continuous Service terminates during the Restricted Period because Participant becomes disabled within the meaning of that term under Section 409A(a)(2)(C) of the Code ("Disability"), PSUs will continue to be eligible to vest during the Restricted Period in accordance with the schedule set forth in Section 2(a), subject to achievement of the performance criteria described in Section 2(a), but without regard to Participant's Continuous Service as set forth in Section 2(a).

(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 Target Award on the date of death.

(f) Settlement of PSUs. As soon as practicable after vesting, each outstanding PSU will be settled through the delivery by Bank of one share of Bank Common Stock and any dividend equivalents credited with respect to such PSU. 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 PSUs.

(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 PSUs been actual Shares will be accumulated and paid in cash to Participant through payroll if and when such PSUs 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 PSUs which are forfeited.

(h) Transferability. Unless otherwise permitted by the Committee pursuant to Section 13(c) of the Plan, the PSUs 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 PSUs unless, until and to the extent that (i) the PSU shall have become vested pursuant to its terms and (ii) Bank shall have issued and delivered to Participant the Shares underlying such PSUs.

(j) Withholding Taxes. To the extent that the vesting of the PSUs 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 PSUs 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 PSUs. 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 PSUs, 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 PSUs 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 PSUs 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 PSUs, the date on which Participant received the first grant of PSUs (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 PSUs.

First Republic Bank

By: ___________________________________

APPENDIX A

RESTRICTIVE COVENANTS

The Restrictive Covenants set forth in this Appendix A to the Performance Share 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 PSUs.

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 "[Consulting][Garden Leave] 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 [Consulting][Garden Leave] 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 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, you will not, in any manner, directly or indirectly 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, 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. <u>Cooperation</u>. 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. <u>Reasonableness of Covenant</u>. 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.

First Republic Bank

By: ___________________________________

PARTICIPANT NAME: ____________________________

ACCEPTED ON: ____________________________

Appendix B

[Performance Criteria]

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: November 6, 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: November 6, 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 September 30, 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: November 6, 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 September 30, 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: November 6, 2020

/s/ Michael J. Roffler

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