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 June 30, 2022

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 5.125% 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**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 4.250% Noncumulative Perpetual Series L Preferred Stock	**FRC-PrL**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 4.000% Noncumulative Perpetual Series M Preferred Stock	**FRC-PrM**	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 4.500% Noncumulative Perpetual Series N Preferred Stock	**FRC-PrN**	**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 August 4, 2022 was 182,715,325.

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EXPLANATORY NOTE

As used throughout this document, the terms "First Republic," the "Bank," "we," "our" and "us" mean, except as the context indicates otherwise, First Republic Bank, a California-chartered commercial bank, including all its subsidiaries.

Some amounts presented within this Quarterly Report on Form 10-Q may not recalculate due to rounding.

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
American Rescue Plan Act	American Rescue Plan Act of 2021
ARM	Adjustable-Rate Mortgage
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
AUA	Assets Under Custody or Administration
AUM	Assets Under Management
Board	Board of Directors of the Bank
bp	Basis Point
CARES Act	Coronavirus Aid, Relief and Economic Security Act
CD	Certificate of Deposit
CECL	Current Expected Credit Losses
CECL Capital Rule	Regulatory Capital Rule: Revised Transition of the Current Expected Credit Losses Methodology for Allowances
CET1	Common Equity Tier 1
CLTV	Combined LTV
CMT	Constant Maturity Treasury
COFI	11th District Monthly Weighted Average Cost of Funds Index
COFI Repl Index	Freddie Mac's Enterprise 11th District COFI Institutional Replacement 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
DTL	Deferred Tax Liability
Economic Aid Act	Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act
EFC	Economic Forecast Committee
EGRRCPA	Economic Growth, Regulatory Relief, and Consumer Protection Act
EPS	Earnings Per Common Share
ESPP	Employee Stock Purchase Plan
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FCA	Financial Conduct Authority
FDIC	Federal Deposit Insurance Corporation
Federal COFI	Federal Cost of Funds Index
Federal Reserve	Federal Reserve System
FHLB	Federal Home Loan Bank
FOMC	Federal Open Market Committee of the Federal Reserve System
Freddie Mac	Federal Home Loan Mortgage Corporation
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
LIBOR Act	Adjustable Interest Rate (LIBOR) Act of 2021
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
PPP Extension Act	PPP Extension Act of 2021
PSU	Performance Share Unit
RSU	Restricted Stock Unit
RWA	Risk-Weighted Asset
SBA	U.S. Small Business Administration
Series G Preferred Stock	Noncumulative Perpetual Series G Preferred Stock
Series H Preferred Stock	Noncumulative Perpetual Series H Preferred Stock
Series I Preferred Stock	Noncumulative Perpetual Series I Preferred Stock
Series J Preferred Stock	Noncumulative Perpetual Series J Preferred Stock
Series K Preferred Stock	Noncumulative Perpetual Series K Preferred Stock
Series L Preferred Stock	Noncumulative Perpetual Series L Preferred Stock
Series M Preferred Stock	Noncumulative Perpetual Series M Preferred Stock
Series N Preferred Stock	Noncumulative Perpetual Series N Preferred Stock
SOFR	Secured Overnight Financing Rate
TDR	Troubled Debt Restructuring
Trust Company	First Republic Trust Company, a division of the Bank, First Republic Trust Company of Delaware LLC, and First Republic Trust Company of Wyoming LLC
USD LIBOR	U.S. Dollar LIBOR
VIE	Variable Interest Entity

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

FIRST REPUBLIC BANK

CONSOLIDATED BALANCE SHEETS

(Unaudited)

(in millions, except share amounts)	June 30, 2022	December 31, 2021
ASSETS		
Cash and cash equivalents	$ 6,237	$ 12,947
Debt securities available-for-sale (amortized cost of $3,761 and $3,425, respectively, and no allowance for credit losses at each respective period-end)	3,438	3,381
Debt securities held-to-maturity, net of allowance for credit losses of $11 and $9, respectively (fair value of $24,080 and $23,422, respectively)	27,710	22,292
Equity securities (fair value)	23	28
Loans	151,519	134,956
Less: Allowance for credit losses	(729)	(694)
Loans, net	150,790	134,262
Investments in life insurance	3,340	2,650
Tax credit investments	1,304	1,220
Premises, equipment and leasehold improvements, net	474	454
Goodwill and other intangible assets	220	222
Other assets	4,372	3,631
Total Assets	$ 197,908	$ 181,087
LIABILITIES AND SHAREHOLDERS' EQUITY		
Liabilities:		
Deposits:		
Noninterest-bearing checking	$ 75,208	$ 70,840
Interest-bearing checking	43,421	41,248
Money market checking	21,235	20,303
Money market savings and passbooks	18,796	16,573
Certificates of deposit	6,987	7,357
Total Deposits	165,647	156,321
Short-term FHLB advances	6,300	—
Long-term FHLB advances	4,700	3,700
Senior notes	499	998
Subordinated notes	779	779
Other liabilities	3,557	3,391
Total Liabilities	181,482	165,189
Shareholders' Equity:		
Preferred stock, $0.01 par value per share; authorized 25,000,000 shares; issued and outstanding 3,632,500 shares at each respective period-end	3,633	3,633
Common stock, $0.01 par value per share; authorized 400,000,000 shares; issued and outstanding 180,108,932 shares and 179,473,451 shares, respectively	2	2
Additional paid-in capital	5,782	5,725
Retained earnings	7,236	6,569
Accumulated other comprehensive loss	(227)	(31)
Total Shareholders' Equity	16,426	15,898
Total Liabilities and Shareholders' Equity	$ 197,908	$ 181,087

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(Unaudited)

($ in millions, except per share amounts)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Interest income:				
Loans	$ 1,094	$ 913	$ 2,096	$ 1,786
Investments	209	157	389	298
Other	2	5	4	10
Cash and cash equivalents	11	3	16	6
Total interest income	1,316	1,078	2,505	2,100
Interest expense:				
Deposits	37	24	57	52
Borrowings	33	51	57	106
Total interest expense	70	75	114	158
Net interest income	1,246	1,003	2,391	1,942
Provision for credit losses	31	16	41	1
Net interest income after provision for credit losses	1,215	987	2,350	1,941
Noninterest income:				
Investment management fees	164	136	329	255
Brokerage and investment fees	33	17	55	32
Insurance fees	3	3	7	6
Trust fees	7	6	14	12
Foreign exchange fee income	25	21	48	38
Deposit fees	8	7	14	13
Loan and related fees	10	9	19	16
Income from investments in life insurance	11	21	25	38
Other income, net	2	6	3	12
Total noninterest income	263	226	514	422
Noninterest expense:				
Salaries and employee benefits	567	482	1,127	945
Information systems	114	88	221	172
Occupancy	70	63	139	121
Professional fees	27	26	50	47
Advertising and marketing	16	16	29	29
FDIC assessments	15	13	30	25
Other expenses	104	74	183	144
Total noninterest expense	913	762	1,779	1,483
Income before provision for income taxes	565	451	1,085	880
Provision for income taxes	132	78	251	172
Net income	433	373	834	708
Dividends on preferred stock	41	23	78	42
Net income available to common shareholders	$ 392	$ 350	$ 756	$ 666
Net income	$ 433	$ 373	$ 834	$ 708
Other comprehensive income (loss), net of tax:				
Net unrealized gain (loss) on debt securities available-for-sale	(90)	11	(196)	(33)
Other comprehensive income (loss)	(90)	11	(196)	(33)
Comprehensive income	$ 343	$ 384	$ 638	$ 675
Basic earnings per common share	$ 2.18	$ 1.98	$ 4.21	$ 3.79
Diluted earnings per common share	$ 2.16	$ 1.95	$ 4.17	$ 3.74

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Unaudited)

(in millions, 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 June 30, 2022 and 2021							
Balance at March 31, 2022	**179,657,145**	**$ 3,633**	**$ 2**	**$ 5,763**	**$ 6,893**	**$ (137)**	**$ 16,154**
Net income	—	—	—	—	433	—	433
Other comprehensive loss	—	—	—	—	—	(90)	(90)
Stock compensation expense	—	—	—	53	—	—	53
Net issuance of common stock under stock plans	451,787	—	—	(34)	—	—	(34)
Dividends on preferred stock (see Note 13)	—	—	—	—	(41)	—	(41)
Dividends on common stock ($0.27/share)	—	—	—	—	(49)	—	(49)
Balance at June 30, 2022	**180,108,932**	**$ 3,633**	**$ 2**	**$ 5,782**	**$ 7,236**	**$ (227)**	**$ 16,426**
Balance at March 31, 2021	**176,286,878**	**$ 2,143**	**$ 2**	**$ 5,191**	**$ 5,627**	**$ (21)**	**$ 12,942**
Net income	—	—	—	—	373	—	373
Other comprehensive income	—	—	—	—	—	11	11
Stock compensation expense	—	—	—	56	—	—	56
Net issuance of common stock under stock plans	454,639	—	—	(44)	—	—	(44)
Dividends on preferred stock (see Note 13)	—	—	—	—	(23)	—	(23)
Dividends on common stock ($0.22/share)	—	—	—	—	(40)	—	(40)
Balance at June 30, 2021	**176,741,517**	**$ 2,143**	**$ 2**	**$ 5,203**	**$ 5,937**	**$ (10)**	**$ 13,275**
At or for the Six Months Ended June 30, 2022 and 2021							
Balance at December 31, 2021	**179,473,451**	**$ 3,633**	**$ 2**	**$ 5,725**	**$ 6,569**	**$ (31)**	**$ 15,898**
Net income	—	—	—	—	834	—	834
Other comprehensive loss	—	—	—	—	—	(196)	(196)
Stock compensation expense	—	—	—	93	—	—	93
Net issuance of common stock under stock plans	635,481	—	—	(36)	—	—	(36)
Dividends on preferred stock (see Note 13)	—	—	—	—	(78)	—	(78)
Dividends on common stock ($0.49/share)	—	—	—	—	(89)	—	(89)
Balance at June 30, 2022	**180,108,932**	**$ 3,633**	**$ 2**	**$ 5,782**	**$ 7,236**	**$ (227)**	**$ 16,426**
Balance at December 31, 2020	**174,123,862**	**$ 1,545**	**$ 2**	**$ 4,835**	**$ 5,346**	**$ 23**	**$ 11,751**
Net income	—	—	—	—	708	—	708
Other comprehensive loss	—	—	—	—	—	(33)	(33)
Issuance of preferred stock, net	—	748	—	(15)	—	—	733
Redemption of preferred stock	—	(150)	—	—	—	—	(150)
Issuance of common stock, net	2,012,500	—	—	331	—	—	331
Stock compensation expense	—	—	—	100	—	—	100
Net issuance of common stock under stock plans	605,155	—	—	(48)	—	—	(48)
Dividends on preferred stock (see Note 13)	—	—	—	—	(42)	—	(42)
Dividends on common stock ($0.42/share)	—	—	—	—	(75)	—	(75)
Balance at June 30, 2021	**176,741,517**	**$ 2,143**	**$ 2**	**$ 5,203**	**$ 5,937**	**$ (10)**	**$ 13,275**

See accompanying notes to consolidated financial statements.

FIRST REPUBLIC BANK

CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

($ in millions)	Six Months Ended June 30, 2022	2021
Operating Activities:		
Net income	$ 834	$ 708
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Provision for credit losses	41	1
Depreciation, amortization and accretion, net	100	92
Deferred income taxes	70	(3)
Noncash cost of stock plans	93	100
Other, net	5	1
Loans originated or purchased for sale	(621)	(960)
Proceeds from sales and principal repayments of loans held for sale	5	49
Net change in other assets	(276)	(353)
Net change in other liabilities	(135)	49
Net Cash Provided by (Used for) Operating Activities	116	(316)
Investing Activities:		
Loan originations, net of principal collections	(16,557)	(10,464)
Loans purchased	(1)	(97)
Purchases of debt securities available-for-sale	—	(183)
Proceeds from paydowns of debt securities available-for-sale	278	330
Purchases of debt securities held-to-maturity	(6,085)	(4,813)
Proceeds from calls and paydowns of debt securities held-to-maturity	673	1,174
Purchases of FHLB stock and other investments	(199)	(12)
Proceeds from FHLB stock redemptions and other investments	18	75
Purchases of investments in life insurance	(668)	(503)
Net change in tax credit and other investments	(79)	(49)
Additions to premises, equipment and leasehold improvements, net	(104)	(90)
Other, net	—	3
Net Cash Used for Investing Activities	(22,724)	(14,629)
Financing Activities:		
Net change in deposits	9,301	19,731
Net change in short-term borrowings	6,300	—
Proceeds from long-term debt	1,000	—
Repayment of long-term debt	(500)	(2,755)
Net proceeds from issuance of preferred stock	—	733
Redemption of preferred stock	—	(150)
Net proceeds from issuance of common stock	—	331
Proceeds from ESPP and stock options exercised	20	14
Payments of employee taxes withheld from share-based awards	(56)	(60)
Dividends on preferred stock	(78)	(42)
Dividends on common stock	(89)	(75)
Net Cash Provided by Financing Activities	15,898	17,727
Increase (Decrease) in Cash and Cash Equivalents	(6,710)	2,782
Cash and Cash Equivalents at the Beginning of Period	12,947	5,095
Cash and Cash Equivalents at the End of Period	$ 6,237	$ 7,877
Supplemental Disclosure of Cash Flow Items:		
Cash paid:		
Interest	$ 112	$ 158
Income taxes	$ 206	$ 149
Non-cash activities:		
Transfer of loans held for sale to debt securities	$ 617	$ 904

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 37 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. 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 results for the periods presented. 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, 2021, included in the Bank's Annual Report on Form 10-K filed with the FDIC (the "2021 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. First Republic specializes in delivering exceptional, relationship-based service and provides a complete line of products, including residential, commercial and personal loans, deposit services, and private wealth management, including investment, brokerage, insurance, trust and foreign exchange services. 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; Jackson, Wyoming; and Bellevue, Washington.

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. A substantial majority 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. 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 2022

During the six months ended June 30, 2022, the Bank adopted the following ASUs issued by the FASB:

ASU 2020-04—Reference Rate Reform (ASC 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting and subsequent related ASU

Under ASC 848, entities can elect not to apply certain modification accounting requirements to contracts affected by reference rate reform if 1) the contract references LIBOR or another reference rate expected to be discontinued, 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 solely related to the replacement of the reference rate. Contract modifications meeting such criteria can be accounted for as a continuation of the existing contract.

The Bank adopted this guidance effective January 1, 2022. This guidance was adopted prospectively with no impact to the Bank's consolidated financial statements. Upon adoption, all eligible loan contract modifications made prior to December 31, 2022 are accounted for as continuations of the existing loan contracts.

The Bank previously had loans that determined the amount of interest by reference to COFI, which the FHLB of San Francisco ceased calculating and publishing on January 31, 2022. In February 2022, the Bank transitioned outstanding loans indexed to COFI to COFI Repl Index, which is based on Federal COFI plus/minus a spread adjustment equal to the five-year historical median spread between COFI and Federal COFI.

The Bank has loans that reference certain tenors of USD LIBOR, which will cease to be published or cease to be representative after June 30, 2023. Additional guidance is expected to be issued by the FASB to extend the applicable date in consideration of the timing of the discontinuation of LIBOR. The Bank is continuing the assessment of outstanding loans indexed to LIBOR.

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, fair value measurements and income taxes.

Note 2. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from the Federal Reserve Bank and commercial banks, and short-term investments such as federal funds sold or U.S. Treasury Bills with original maturity dates of 90 days or less.

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

($ in millions)	June 30, 2022	December 31, 2021
Cash and due from banks	$ 494	$ 368
Interest-bearing deposits with banks	5,743	12,579
Total cash and cash equivalents	$ 6,237	$ 12,947

Note 3. Investment Securities and Allowance for Credit Losses

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

	Available-for-sale				
($ in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Value
At June 30, 2022					
Agency residential MBS	$ 2,373	$ —	$ (302)	$ —	$ 2,071
Other residential MBS	12	—	—	—	12
Agency commercial MBS	1,329	1	(22)	—	1,308
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,761	$ 1	$ (324)	$ —	$ 3,438
At December 31, 2021					
Agency residential MBS	$ 1,878	$ 2	$ (51)	$ —	$ 1,829
Other residential MBS	15	—	—	—	15
Agency commercial MBS	1,485	6	(1)	—	1,490
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,425	$ 8	$ (52)	$ —	$ 3,381

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

($ in millions)	Held-to-maturity Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Allowance for Credit Losses	Amortized Cost, Net of Allowance
At June 30, 2022						
U.S. Government-sponsored agency securities	$ 165	$ —	$ (17)	$ 148	$ —	$ 165
Agency residential MBS	1,794	—	(157)	1,637	—	1,794
Other residential MBS	8	—	—	8	—	8
Agency commercial MBS	5,399	—	(381)	5,018	—	5,399
Securities of U.S. states and political subdivisions:						
Tax-exempt municipal securities	17,145	85	(2,502)	14,728	(10)	17,135
Tax-exempt nonprofit debentures	71	—	(1)	70	—	71
Taxable municipal securities	1,726	5	(345)	1,386	(1)	1,725
Corporate debt securities	1,413	—	(328)	1,085	—	1,413
Total	$ 27,721	$ 90	$ (3,731)	$ 24,080	$ (11)	$ 27,710
At December 31, 2021						
U.S. Government-sponsored agency securities	$ 100	$ —	$ (3)	$ 97	$ —	$ 100
Agency residential MBS	1,380	13	(15)	1,378	—	1,380
Other residential MBS	9	—	—	9	—	9
Agency commercial MBS	2,719	35	(12)	2,742	—	2,719
Securities of U.S. states and political subdivisions:						
Tax-exempt municipal securities	15,011	997	(21)	15,987	(8)	15,003
Tax-exempt nonprofit debentures	72	1	—	73	—	72
Taxable municipal securities	1,632	66	(1)	1,697	(1)	1,631
Corporate debt securities	1,378	62	(1)	1,439	—	1,378
Total	$ 22,301	$ 1,174	$ (53)	$ 23,422	$ (9)	$ 22,292

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

($ in millions)	June 30, 2022	December 31, 2021
Equity securities (fair value):		
Mutual funds and marketable equity securities	$ 23	$ 28

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:

($ in millions)	June 30, 2022	December 31, 2021
Interest receivable on debt securities available-for-sale	$ 5	$ 4
Interest receivable on debt securities held-to-maturity	$ 201	$ 177

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 BB (Ba), which reflect the strong overall credit quality of the investment portfolio. 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.
- BB (Ba) rated securities reflect slightly more than moderate credit risk of an obligor, given that economic uncertainties may result in deterioration of the obligor's ability to meet commitments in the future.

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

	Held-to-maturity					
($ in millions)	**AAA (Aaa)**	**AA (Aa)**	**A (A)**	**BBB (Baa)**	**BB (Ba)**	**Total**
At June 30, 2022						
U.S. Government-sponsored agency securities	$ —	$ 165	$ —	$ —	$ —	$ 165
Agency residential MBS	—	1,794	—	—	—	1,794
Other residential MBS	8	—	—	—	—	8
Agency commercial MBS	—	5,399	—	—	—	5,399
Securities of U.S. states and political subdivisions:						
Tax-exempt municipal securities	4,820	12,157	168	—	—	17,145
Tax-exempt nonprofit debentures	—	—	—	48	23	71
Taxable municipal securities	618	1,108	—	—	—	1,726
Corporate debt securities	551	862	—	—	—	1,413
Total	$ 5,997	$ 21,485	$ 168	$ 48	$ 23	$ 27,721

	Held-to-maturity				
($ in millions)	AAA (Aaa)	AA (Aa)	A (A)	BBB (Baa)	Total
At December 31, 2021					
U.S. Government-sponsored agency securities	$ —	$ 100	$ —	$ —	$ 100
Agency residential MBS	—	1,380	—	—	1,380
Other residential MBS	9	—	—	—	9
Agency commercial MBS	—	2,719	—	—	2,719
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	4,201	10,585	225	—	15,011
Tax-exempt nonprofit debentures	—	—	—	72	72
Taxable municipal securities	562	1,070	—	—	1,632
Corporate debt securities	525	853	—	—	1,378
Total	$ 5,297	$ 16,707	$ 225	$ 72	$ 22,301

The carrying value of held-to-maturity debt securities that were internally rated and translated to a corresponding external grade, all of which were tax-exempt nonprofit debentures, was $71 million and $72 million at June 30, 2022 and December 31, 2021, respectively.

Aging and Nonaccrual

As of both June 30, 2022 and December 31, 2021, 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:

	Available-for-sale						
	Less than 12 months		12 months or more		Total		
($ in millions)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Total Number of Securities
At June 30, 2022							
Agency residential MBS	$ (119)	$ 1,075	$ (183)	$ 995	$ (302)	$ 2,070	898
Agency commercial MBS	(22)	1,209	—	—	(22)	1,209	42
Total	$ (141)	$ 2,284	$ (183)	$ 995	$ (324)	$ 3,279	940
At December 31, 2021							
Agency residential MBS	$ (26)	$ 1,113	$ (25)	$ 627	$ (51)	$ 1,740	555
Agency commercial MBS	(1)	863	—	—	(1)	863	12
Total	$ (27)	$ 1,976	$ (25)	$ 627	$ (52)	$ 2,603	567

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. 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. Therefore, no ACL was recognized on available-for-sale debt securities as of both June 30, 2022 and December 31, 2021.

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) and corporate debt securities is determined by expert judgment, which is based on historical ratings-based average probabilities of default and industry average LGD to determine expected credit losses over the life of the securities.

The following table presents the activity in the ACL on held-to-maturity debt securities:

	Allowance for Credit Losses		
	Held-to-maturity		
($ in millions)	Balance at Beginning of Period	Provision	Balance at End of Period
At or for the Quarter Ended June 30, 2022			
Securities of U.S. states and political subdivisions:			
Tax-exempt municipal securities	$ 9	$ 1	$ 10
Taxable municipal securities	1	—	1
Total	$ 10	$ 1	$ 11
At or for the Six Months Ended June 30, 2022			
Securities of U.S. states and political subdivisions:			
Tax-exempt municipal securities	$ 8	$ 2	$ 10
Taxable municipal securities	1	—	1
Total	$ 9	$ 2	$ 11
At or for the Quarter Ended June 30, 2021			
Securities of U.S. states and political subdivisions:			
Tax-exempt municipal securities	$ 7	$ 1	$ 8
Taxable municipal securities	1	—	1
Total	$ 8	$ 1	$ 9
At or for the Six Months Ended June 30, 2021			
Securities of U.S. states and political subdivisions:			
Tax-exempt municipal securities	$ 7	$ 1	$ 8
Taxable municipal securities	—	1	1
Total	$ 7	$ 2	$ 9

Other Disclosures

The Bank pledges investment securities at the Federal Reserve Bank 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 June 30, 2022, the carrying value of investment securities pledged was $5.32 billion, of which $5.26 billion was unencumbered and available to support additional borrowings.

The following table presents gains and losses on investment securities:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Equity securities (fair value):				
Net change in fair value	$ (2)	$ 1	$ (5)	$ 2
Total gain (loss) on investment securities [1]	$ (2)	$ 1	$ (5)	$ 2

[1] Included in other income, net on the consolidated statements of income and comprehensive income.

The following table presents interest income on investment securities:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Interest income on tax-exempt securities	$ 128	$ 106	$ 246	$ 205
Interest income on taxable securities	81	51	143	93
Total	$ 209	$ 157	$ 389	$ 298

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 millions)	**Amount**	**Within 1 Year**	**After 1 Through 5 Years**	**After 5 Through 10 Years**	**After 10 Years**
At June 30, 2022					
Amortized cost:					
Agency residential MBS	$ 2,373	$ —	$ 1	$ —	$ 2,372
Other residential MBS	12	—	—	—	12
Agency commercial MBS	1,329	—	33	1,093	203
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,761	$ —	$ 34	$ 1,093	$ 2,634
Fair value:					
Agency residential MBS	$ 2,071	$ —	$ 1	$ —	$ 2,070
Other residential MBS	12	—	—	—	12
Agency commercial MBS	1,308	—	33	1,082	193
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,438	$ —	$ 34	$ 1,082	$ 2,322

($ in millions)	Available-for-sale Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At December 31, 2021					
Amortized cost:					
Agency residential MBS	$ 1,878	$ —	$ 1	$ —	$ 1,877
Other residential MBS	15	—	—	—	15
Agency commercial MBS	1,485	—	82	1,144	259
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,425	$ —	$ 83	$ 1,144	$ 2,198
Fair value:					
Agency residential MBS	$ 1,829	$ —	$ 1	$ —	$ 1,828
Other residential MBS	15	—	—	—	15
Agency commercial MBS	1,490	—	82	1,144	264
Securities of U.S. states and political subdivisions—taxable	47	—	—	—	47
Total	$ 3,381	$ —	$ 83	$ 1,144	$ 2,154

($ in millions)	Held-to-maturity Amount	Within 1 Year	After 1 Through 5 Years	After 5 Through 10 Years	After 10 Years
At June 30, 2022					
Amortized cost, net of allowance:					
U.S. Government-sponsored agency securities	$ 165	$ —	$ 65	$ 50	$ 50
Agency residential MBS	1,794	—	3	—	1,791
Other residential MBS	8	—	—	—	8
Agency commercial MBS	5,399	—	—	—	5,399
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	17,135	247	625	105	16,158
Tax-exempt nonprofit debentures	71	—	—	—	71
Taxable municipal securities	1,725	—	—	—	1,725
Corporate debt securities	1,413	—	—	—	1,413
Total	$ 27,710	$ 247	$ 693	$ 155	$ 26,615
At December 31, 2021					
Amortized cost, net of allowance:					
U.S. Government-sponsored agency securities	$ 100	$ —	$ —	$ —	$ 100
Agency residential MBS	1,380	—	3	—	1,377
Other residential MBS	9	—	—	—	9
Agency commercial MBS	2,719	—	109	—	2,610
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	15,003	262	647	106	13,988
Tax-exempt nonprofit debentures	72	—	—	—	72
Taxable municipal securities	1,631	—	—	—	1,631
Corporate debt securities	1,378	—	—	—	1,378
Total	$ 22,292	$ 262	$ 759	$ 106	$ 21,165

Note 4. Loans and Allowance for Credit Losses

Loan Profile

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

($ in millions)	June 30, 2022	December 31, 2021
Residential real estate		
Single family	$ 89,295	$ 76,793
Home equity lines of credit	2,699	2,584
Single family construction	1,117	993
Total residential real estate	93,111	80,370
Income property		
Multifamily	18,346	15,966
Commercial real estate	9,182	8,531
Multifamily/commercial construction	2,019	1,927
Total income property	29,547	26,424
Business		
Capital call lines of credit	10,727	10,999
Tax-exempt	3,605	3,680
Other business	4,638	3,961
PPP	82	545
Total business	19,052	19,185
Other		
Stock secured	4,041	3,435
Other secured	2,774	2,457
Unsecured	2,994	3,085
Total other	9,809	8,977
Total loans held for investment	151,519	134,956
Less: Allowance for credit losses	(729)	(694)
Loans, net	$ 150,790	$ 134,262

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 June 30, 2022 and December 31, 2021, 52% and 51%, respectively, of the total loan portfolio was secured by California real estate. At June 30, 2022 and December 31, 2021, 60% and 61%, respectively, of single family mortgages fully and evenly amortize until maturity following an initial interest-only period of generally ten years.

As of June 30, 2022, the Bank had pledged $88.1 billion of loans to secure borrowings of $11.0 billion from the FHLB, although only $14.5 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 millions)	June 30, 2022	December 31, 2021
Interest receivable	$ 361	$ 319

Aging and Nonaccrual

The following table presents an aging analysis of loans:

($ in millions)	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Total Loans
At June 30, 2022						
Residential real estate						
Single family	$ 24	$ 6	$ 45	$ 75	$ 89,220	$ 89,295
Home equity lines of credit	1	3	18	22	2,677	2,699
Single family construction	4	—	—	4	1,113	1,117
Total residential real estate	29	9	63	101	93,010	93,111
Income property						
Multifamily	—	—	—	—	18,346	18,346
Commercial real estate	—	—	1	1	9,181	9,182
Multifamily/commercial construction	—	—	—	—	2,019	2,019
Total income property	—	—	1	1	29,546	29,547
Business						
Capital call lines of credit	—	—	—	—	10,727	10,727
Tax-exempt	—	—	—	—	3,605	3,605
Other business	—	—	—	—	4,638	4,638
PPP	—	3	—	3	79	82
Total business	—	3	—	3	19,049	19,052
Other						
Stock secured	—	—	—	—	4,041	4,041
Other secured	4	—	—	4	2,770	2,774
Unsecured	2	—	—	2	2,992	2,994
Total other	6	—	—	6	9,803	9,809
Total	$ 35	$ 12	$ 64	$ 111	$ 151,408	$ 151,519
At December 31, 2021						
Residential real estate						
Single family	$ 9	$ 10	$ 48	$ 67	$ 76,726	$ 76,793
Home equity lines of credit	2	—	19	21	2,563	2,584
Single family construction	—	—	—	—	993	993
Total residential real estate	11	10	67	88	80,282	80,370
Income property						
Multifamily	—	—	2	2	15,964	15,966
Commercial real estate	—	1	5	6	8,525	8,531
Multifamily/commercial construction	—	—	—	—	1,927	1,927
Total income property	—	1	7	8	26,416	26,424
Business						
Capital call lines of credit	—	—	—	—	10,999	10,999
Tax-exempt	—	—	—	—	3,680	3,680
Other business	—	—	—	—	3,961	3,961
PPP	1	14	—	15	530	545
Total business	1	14	—	15	19,170	19,185
Other						
Stock secured	—	—	—	—	3,435	3,435
Other secured	—	—	—	—	2,457	2,457
Unsecured	—	—	—	—	3,085	3,085
Total other	—	—	—	—	8,977	8,977
Total	$ 12	$ 25	$ 74	$ 111	$ 134,845	$ 134,956

The table below presents information on loans 90 days or more past due and accruing and loans on nonaccrual status:

	June 30, 2022			December 31, 2021		
		Nonaccrual			Nonaccrual	
($ in millions)	**90 Days or More Past Due and Accruing**	**Total**	**Total Without an Allowance**	**90 Days or More Past Due and Accruing**	**Total**	**Total Without an Allowance**
Residential real estate						
Single family	$ —	$ 91	$ 79	$ —	$ 92	$ 76
Home equity lines of credit	—	28	26	—	26	24
Total residential real estate	—	119	105	—	118	100
Income property						
Multifamily	—	—	—	—	2	2
Commercial real estate	—	3	3	—	7	7
Multifamily/commercial construction	—	9	8	—	9	9
Total income property	—	12	11	—	18	18
Business						
Other business	—	1	1	—	1	1
Other						
Unsecured	—	5	2	—	2	—
Total	$ —	$ 137	$ 119	$ —	$ 139	$ 119

The interest income related to nonaccrual loans is presented in the following table:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Actual interest income recognized	$ —	$ —	$ —	$ —
Interest income under original terms	$ 1	$ 1	$ 3	$ 2

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. 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 June 30, 2022 and December 31, 2021, the Bank did not have any residential real estate owned (acquired through foreclosure).

The carrying value of residential mortgage loans in the process of foreclosure was $20 million and $6 million at June 30, 2022 and December 31, 2021, respectively.

Vintage

The following tables present 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 tables.

($ in millions)	2022	2021	2020	2019	2018	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At June 30, 2022									
Residential real estate									
Single family:									
Pass	$ 18,924	$ 27,657	$ 18,501	$ 8,979	$ 4,028	$ 11,020	$ —	$ —	$ 89,109
Special mention	—	—	6	9	7	44	—	—	66
Substandard	—	6	1	—	7	106	—	—	120
	18,924	27,663	18,508	8,988	4,042	11,170	—	—	89,295
Home equity lines of credit:									
Pass	—	—	—	—	—	—	2,605	60	2,665
Special mention	—	—	—	—	—	—	2	—	2
Substandard	—	—	—	—	—	—	16	16	32
	—	—	—	—	—	—	2,623	76	2,699
Single family construction:									
Pass	201	378	304	145	71	18	—	—	1,117
Total residential real estate	19,125	28,041	18,812	9,133	4,113	11,188	2,623	76	93,111
Income property									
Multifamily:									
Pass	3,808	4,610	3,311	2,138	1,409	2,465	497	—	18,238
Special mention	30	—	—	—	—	14	—	—	44
Substandard	—	35	—	6	1	22	—	—	64
	3,838	4,645	3,311	2,144	1,410	2,501	497	—	18,346
Commercial real estate:									
Pass	1,424	1,993	1,433	1,093	827	2,144	176	—	9,090
Special mention	—	—	5	14	14	36	—	—	69
Substandard	—	3	—	8	—	12	—	—	23
	1,424	1,996	1,438	1,115	841	2,192	176	—	9,182
Multifamily/commercial construction:									
Pass	259	557	621	379	151	23	8	—	1,998
Special mention	—	12	—	—	—	—	—	—	12
Substandard	—	—	—	—	9	—	—	—	9
	259	569	621	379	160	23	8	—	2,019
Total income property	5,521	7,210	5,370	3,638	2,411	4,716	681	—	29,547

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($ in millions)	2022	2021	2020	2019	2018	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At June 30, 2022									
Business									
Capital call lines of credit:									
Pass	—	—	—	—	—	16	10,711	—	10,727
Tax-exempt:									
Pass	110	653	1,016	129	212	1,462	—	—	3,582
Special mention	—	—	6	—	—	17	—	—	23
	110	653	1,022	129	212	1,479	—	—	3,605
Other business:									
Pass	725	1,027	660	308	259	301	1,335	—	4,615
Special mention	—	2	—	—	—	5	—	—	7
Substandard	—	—	—	1	—	14	1	—	16
	725	1,029	660	309	259	320	1,336	—	4,638
PPP:									
Pass	2	70	10	—	—	—	—	—	82
Total business	837	1,752	1,692	438	471	1,815	12,047	—	19,052
Other									
Stock secured:									
Pass	60	2	20	1	3	—	3,955	—	4,041
Other secured:									
Pass	157	219	176	153	54	70	1,939	4	2,772
Substandard	—	1	1	—	—	—	—	—	2
	157	220	177	153	54	70	1,939	4	2,774
Unsecured:									
Pass	111	157	272	422	388	480	1,150	—	2,980
Special mention	—	2	—	—	—	—	—	—	2
Substandard	—	1	1	—	2	3	3	—	10
Doubtful	—	—	—	1	—	1	—	—	2
	111	160	273	423	390	484	1,153	—	2,994
Total other	328	382	470	577	447	554	7,047	4	9,809
Total	$ 25,811	$ 37,385	$ 26,344	$13,786	$ 7,442	$ 18,273	$ 22,398	$ 80	$151,519

($ in millions)	2021	2020	2019	2018	2017	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At December 31, 2021									
Residential real estate									
Single family:									
Pass	$ 28,679	$ 20,002	$ 10,107	$ 4,672	$ 5,178	$ 7,949	$ —	$ —	$ 76,587
Special mention	—	3	12	13	23	39	—	—	90
Substandard	7	1	1	6	26	75	—	—	116
	28,686	20,006	10,120	4,691	5,227	8,063	—	—	76,793
Home equity lines of credit:									
Pass	—	—	—	—	—	—	2,489	57	2,546
Special mention	—	—	—	—	—	—	7	1	8
Substandard	—	—	—	—	—	—	16	14	30
	—	—	—	—	—	—	2,512	72	2,584
Single family construction:									
Pass	376	275	217	92	31	2	—	—	993
Total residential real estate	29,062	20,281	10,337	4,783	5,258	8,065	2,512	72	80,370
Income property									
Multifamily:									
Pass	4,803	3,567	2,412	1,647	1,243	1,854	330	—	15,856
Special mention	—	—	30	—	1	—	—	—	31
Substandard	35	—	8	14	—	22	—	—	79
	4,838	3,567	2,450	1,661	1,244	1,876	330	—	15,966
Commercial real estate:									
Pass	2,096	1,498	1,147	924	671	1,711	251	—	8,298
Special mention	2	5	14	26	16	66	—	—	129
Substandard	20	1	39	5	18	19	2	—	104
	2,118	1,504	1,200	955	705	1,796	253	—	8,531
Multifamily/commercial construction:									
Pass	449	725	507	178	23	8	9	—	1,899
Special mention	19	—	—	—	—	—	—	—	19
Substandard	—	—	—	9	—	—	—	—	9
	468	725	507	187	23	8	9	—	1,927
Total income property	7,424	5,796	4,157	2,803	1,972	3,680	592	—	26,424

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($ in millions)	2021	2020	2019	2018	2017	Prior	Revolving lines of credit	Revolving lines of credit converted to term	Total
At December 31, 2021									
Business									
Capital call lines of credit:									
Pass	—	—	3	—	—	—	10,996	—	10,999
Tax-exempt:									
Pass	626	990	164	223	371	1,290	—	—	3,664
Special mention	—	6	7	—	—	3	—	—	16
	626	996	171	223	371	1,293	—	—	3,680
Other business:									
Pass	849	739	355	307	123	271	1,277	—	3,921
Special mention	2	2	2	—	11	11	3	—	31
Substandard	—	—	3	—	2	4	—	—	9
	851	741	360	307	136	286	1,280	—	3,961
PPP:									
Pass	462	83	—	—	—	—	—	—	545
Total business	1,939	1,820	534	530	507	1,579	12,276	—	19,185
Other									
Stock secured:									
Pass	2	20	1	3	—	—	3,409	—	3,435
Other secured:									
Pass	225	197	173	100	35	49	1,641	36	2,456
Substandard	—	—	1	—	—	—	—	—	1
	225	197	174	100	35	49	1,641	36	2,457
Unsecured:									
Pass	333	356	491	456	285	261	891	—	3,073
Substandard	1	1	1	3	2	2	1	—	11
Doubtful	—	—	—	—	—	—	1	—	1
	334	357	492	459	287	263	893	—	3,085
Total other	561	574	667	562	322	312	5,943	36	8,977
Total	$ 38,986	$ 28,471	$ 15,695	$ 8,678	$ 8,059	$13,636	$ 21,323	$ 108	$134,956

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

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Residential real estate				
Home equity lines of credit	$ 12	$ 5	$ 19	$ 7
Other				
Other secured	4	8	28	11
Total	$ 16	$ 13	$ 47	$ 18

Allowance for Credit Losses on Loans

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. As of June 30, 2022, the total ACL on loans was $729 million, and $696 million was the portion of the ACL attributable to loans with similar risk characteristics, compared to a total ACL on loans of $694 million as of December 31, 2021, of which $653 million was attributable to loans with similar risk characteristics. 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 (or repayments) 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 EFC 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, contractual maturity dates, prepayment (or repayment) projections and, in most cases, loan specific risk characteristics. Prepayment (or repayment) projections are either developed based on historical experience or modeled using the macroeconomic forecast scenario, contractual maturity dates, and 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. The macroeconomic forecast scenario selected by the EFC as of June 30, 2022 is generally comparable to the scenario as of December 31, 2021. The scenario forecasts an overall appreciation in residential, apartment and commercial real estate prices during the reasonable and supportable period. The current scenario also projects higher interest rates as of June 30, 2022 compared to the December 31, 2021 scenario due to the anticipated tightening of monetary policy.

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. For other secured and certain unsecured loans, the loss rate models use the relationship between historical losses, historical macroeconomic factors, and forward-looking macroeconomic information to determine an expected loss rate.

Subsequent to the reasonable and supportable period, the Bank reverts to its historical loss rate and historical prepayment (or repayment) speed on a straight-line basis over the reversion period of one year.

After the reversion period, the Bank's historical loss rate and historical prepayment (or repayment) speed are used to estimate expected credit losses for the remaining life of the loan. These rates are based on the average net charge-offs and average prepayment (or repayment) speeds, respectively, over a 12-year historical period for all loans. The historical period used by the Bank is reviewed at least annually. Prior to the third quarter of 2021, a ten-year historical period was used for all loans except tax-exempt business loans, for which a 15-year historical period was used. Beginning in the third quarter of 2021, the Bank changed the historical period over which these rates are calculated to reflect the length of the most recent economic cycle (i.e., 12 years).

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, specifically, idiosyncratic risks or risks related to newer loan products, not already reflected in the historical loss experience. 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.

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 loss rates derived using a more adverse macroeconomic forecast scenario than the scenario used for the quantitative models and the Bank's historical loss rates, as well as 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 changes, 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. The following discussion describes these 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 June 30, 2022, the Bank's collateral dependent loans were fully collateralized and primarily secured by residential real estate.

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: For criticized or classified loans (that are not collateral dependent or TDRs), 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 (Reversal of Provision) for Credit Losses and Changes in the Allowance for Credit Losses

The following table presents information related to the provision (reversal of provision) for credit losses:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Provision (reversal of provision) for credit losses:				
Debt securities held-to-maturity [1]	$ 1	$ 1	$ 2	$ 2
Loans	29	17	36	3
Unfunded loan commitments	1	(2)	3	(4)
Total provision	$ 31	$ 16	$ 41	$ 1

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

The following tables present the changes in the ACL on loans:

($ in millions)	Allowance for Credit Losses on Loans: Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period
At or for the Quarter Ended June 30, 2022					
Residential real estate					
Single family	$ 155	$ 13	$ (1)	$ —	$ 167
Home equity lines of credit	4	—	—	—	4
Single family construction	5	—	—	—	5
Total residential real estate	164	13	(1)	—	176
Income property					
Multifamily	130	16	—	—	146
Commercial real estate	78	(1)	—	—	77
Multifamily/commercial construction	25	(2)	—	—	23
Total income property	233	13	—	—	246
Business					
Capital call lines of credit	129	—	—	—	129
Tax-exempt	46	—	—	—	46
Other business	80	6	—	—	86
PPP	—	—	—	—	—
Total business	255	6	—	—	261
Other					
Stock secured	—	—	—	—	—
Other secured	8	1	—	—	9
Unsecured	41	(4)	—	—	37
Total other	49	(3)	—	—	46
Total	$ 701	$ 29	$ (1)	$ —	$ 729
At or for the Six Months Ended June 30, 2022					
Residential real estate					
Single family	$ 157	$ 11	$ (1)	$ —	$ 167
Home equity lines of credit	4	—	—	—	4
Single family construction	5	—	—	—	5
Total residential real estate	166	11	(1)	—	176
Income property					
Multifamily	121	25	—	—	146
Commercial real estate	82	(5)	—	—	77
Multifamily/commercial construction	24	(1)	—	—	23
Total income property	227	19	—	—	246
Business					
Capital call lines of credit	123	6	—	—	129
Tax-exempt	47	(1)	—	—	46
Other business	78	8	—	—	86
PPP	—	—	—	—	—
Total business	248	13	—	—	261
Other					
Stock secured	—	—	—	—	—
Other secured	8	1	—	—	9
Unsecured	45	(8)	(1)	1	37
Total other	53	(7)	(1)	1	46
Total	$ 694	$ 36	$ (2)	$ 1	$ 729

($ in millions)	Allowance for Credit Losses on Loans: Balance at Beginning of Period	Provision (Reversal of provision)	Charge-offs	Recoveries	Balance at End of Period
At or for the Quarter Ended June 30, 2021					
Residential real estate					
Single family	$ 131	$ 12	$ (1)	$ —	$ 142
Home equity lines of credit	6	(1)	—	—	5
Single family construction	3	—	—	—	3
Total residential real estate	140	11	(1)	—	150
Income property					
Multifamily	112	3	—	—	115
Commercial real estate	67	10	—	—	77
Multifamily/commercial construction	36	(3)	—	—	33
Total income property	215	10	—	—	225
Business					
Capital call lines of credit	104	(7)	—	—	97
Tax-exempt	37	—	—	—	37
Other business	72	1	—	1	74
Paycheck protection program	—	—	—	—	—
Total business	213	(6)	—	1	208
Other					
Stock secured	—	—	—	—	—
Other secured	7	—	—	—	7
Unsecured	46	2	(1)	—	47
Total other	53	2	(1)	—	54
Total	$ 621	$ 17	$ (2)	$ 1	$ 637
At or for the Six Months Ended June 30, 2021					
Residential real estate					
Single family	$ 137	$ 6	$ (1)	$ —	$ 142
Home equity lines of credit	8	(3)	—	—	5
Single family construction	4	(1)	—	—	3
Total residential real estate	149	2	(1)	—	150
Income property					
Multifamily	121	(6)	—	—	115
Commercial real estate	71	6	—	—	77
Multifamily/commercial construction	36	(3)	—	—	33
Total income property	228	(3)	—	—	225
Business					
Capital call lines of credit	90	7	—	—	97
Tax-exempt	40	(3)	—	—	37
Other business	68	5	—	1	74
PPP	—	—	—	—	—
Total business	198	9	—	1	208
Other					
Stock secured	—	—	—	—	—
Other secured	8	(1)	—	—	7
Unsecured	52	(4)	(1)	—	47
Total other	60	(5)	(1)	—	54
Total	$ 635	$ 3	$ (2)	$ 1	$ 637

As of June 30, 2022, the total ACL on loans was $729 million, compared to $701 million as of March 31, 2022 and $694 million as of December 31, 2021. The increase in the total ACL on loans as of June 30, 2022 compared to March 31, 2022 was primarily due to loan growth. The increase in total ACL on loans as of June 30, 2022 compared to December 31, 2021 was primarily due to loan growth, which was partially offset by a reduction in ACL due to the improvements in individually assessed loans.

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. The loss rate represents expected credit losses over the life of the loans. The increases in the ACL on unfunded loan commitments as of June 30, 2022 compared to March 31, 2022 and December 31, 2021 were primarily due to an increase in unfunded commitments. The following table presents the changes in the ACL on unfunded loan commitments:

($ in millions)	At or for the Quarter Ended June 30, 2022	At or for the Quarter Ended June 30, 2021	At or for the Six Months Ended June 30, 2022	At or for the Six Months Ended June 30, 2021
Balance at beginning of period	$ 26	$ 26	$ 24	$ 28
Provision (reversal of provision)	1	(2)	3	(4)
Balance at end of period	$ 27	$ 24	$ 27	$ 24

Troubled Debt Restructurings

The following table presents loans modified in TDRs:

($ in millions)	At June 30, 2022 Restructured - Nonaccrual	At June 30, 2022 Restructured - Accruing	At June 30, 2022 Total	At December 31, 2021 Restructured - Nonaccrual	At December 31, 2021 Restructured - Accruing	At December 31, 2021 Total
Residential real estate						
Single family	$ 37	$ 6	$ 43	$ 39	$ 8	$ 47
Home equity lines of credit	9	—	9	11	—	11
Total residential real estate	46	6	52	50	8	58
Income property						
Commercial real estate	—	6	6	1	5	6
Business						
Other business	1	—	1	1	—	1
Other						
Unsecured	3	—	3	—	—	—
Total	$ 50	$ 12	$ 62	$ 52	$ 13	$ 65

During the quarters and six months ended June 30, 2022 and 2021, TDRs were primarily modified through extensions of the maturity date, repayment plans and payment deferrals. The following table presents loans modified in TDRs during the periods indicated:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Residential real estate				
Single family	$ 1	$ 1	$ 1	$ 1
Home equity lines of credit	—	1	—	1
Total residential real estate	1	2	1	2
Other				
Unsecured	3	—	3	—
Total	$ 4	$ 2	$ 4	$ 2

No loans defaulted that were modified during the twelve months ended June 30, 2022. A TDR that was modified during the twelve months ended June 30, 2021 and for which there was a subsequent payment default during the quarter and six months ended June 30, 2021 totaled $3 million. The ACL on this loan was individually assessed at the loan level and was based on the collateral dependent methodology.

Note 5. Mortgage Banking Activities

The following table presents information on loans originated and sold:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Total loans originated	$ 21,969	$ 16,751	$ 39,779	$ 32,472
Single family loans originated	$ 10,638	$ 8,662	$ 19,014	$ 15,564
Loans sold:				
Flow sales:				
Agency	$ —	$ 5	$ 5	$ 47
Non-agency	—	—	—	1
Total	$ —	$ 5	$ 5	$ 48

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 June 30,		At or for the Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Loans serviced for others:				
Beginning balance	$ 4,298	$ 6,314	$ 4,677	$ 7,094
Loans sold	—	5	5	48
Repayments	(379)	(679)	(762)	(1,502)
Loans repurchased	—	—	(1)	—
Ending balance	$ 3,919	$ 5,640	$ 3,919	$ 5,640
MSRs:				
Beginning balance	$ 15	$ 23	$ 16	$ 26
Amortization expense	(2)	(2)	(3)	(4)
Provision for valuation allowance	—	—	—	(1)
Ending balance (1)	$ 13	$ 21	$ 13	$ 21
MSRs as a percent of loans serviced	0.34 %	0.37 %	0.34 %	0.37 %
Weighted average servicing fee collected for the period (annualized)	0.26 %	0.25 %	0.25 %	0.25 %
MSRs as a multiple of weighted average servicing fee	1.33 x	1.49 x	1.35 x	1.48 x

(1) Included in other assets on the consolidated balance sheets. The valuation allowance for MSRs was $0 million as of both June 30, 2022 and 2021.

The following table presents net loan servicing fees:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Contractually specified servicing fees	$ 4	$ 4	$ 6	$ 8
MSR amortization expense	(2)	(2)	(3)	(4)
MSR net provision for valuation allowance	—	—	—	(1)
Loan servicing fees, net (1)	$ 2	$ 2	$ 3	$ 3

(1) Included in other income, net on the consolidated statements of income and comprehensive income.

Refer to Note 8, "Goodwill and Intangible Assets," for disclosures of the gross carrying value, accumulated amortization, valuation allowance and carrying value 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. The discussion below provides information about our variable interests. Since the Bank is not the primary beneficiary of any of its VIEs, it does not consolidate these interests.

The Bank has a variable interest in a securitization trust related to its retention of a 5% interest in the investment securities issued in a securitization of single family loans. The retained investments 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.

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.

The Bank has variable interests in other investments, which are accounted for under the equity method.

In addition, the Bank has a variable interest related to its reimbursement obligation to Freddie Mac for certain losses from the securitization of multifamily loans.

All assets and liabilities recorded associated with transactions with VIEs are not consolidated. The following table summarizes the assets and liabilities recorded on the consolidated balance sheets associated with transactions with VIEs:

	Unconsolidated VIEs	
($ in millions)	**June 30, 2022**	**December 31, 2021**
Assets:		
Debt securities	$ 9	$ 10
Tax credit investments	1,304	1,220
Other investments	99	77
Total Assets	1,412	1,307
Liabilities:		
Unfunded commitments—tax credit investments	644	540
Unfunded commitments—other investments	37	18
Total Liabilities	681	558
Net Assets	$ 731	$ 749

The Bank's exposure to loss with respect to VIEs that are not consolidated includes the Bank's investment in these assets of $1.4 billion and $1.3 billion at June 30, 2022 and December 31, 2021, respectively. The Bank's exposure to loss related to the reimbursement obligation is 12% of the multifamily loans securitized in 2018, or $30 million at both June 30, 2022 and December 31, 2021.

Note 7. Leases

The Bank primarily leases corporate, preferred banking and wealth management offices, as well as equipment, with remaining lease terms ranging from 1 year to 19 years. The majority of our office leases include one or more options to extend the lease term, primarily up to 5 years at a time. From time to time, the Bank may also enter into subleases with third parties for certain leased real estate properties.

The following tables present information related to leases:

($ in millions)	June 30, 2022	December 31, 2021
Supplemental balance sheet information:		
Lease assets [1]	$ 1,445	$ 1,332
Lease liabilities [1]	$ 1,538	$ 1,405

[1] Lease assets are included in other assets and lease liabilities are included in other liabilities on the consolidated balance sheets.

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	2022	2021	2022	2021
Components of net lease cost:				
Operating lease cost	$ 45	$ 41	$ 90	$ 76
Less: sublease income	(1)	(1)	(3)	(1)
Net lease cost [1]	$ 44	$ 40	$ 87	$ 75

[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:

	June 30, 2022			December 31, 2021		
($ in millions)	Gross Carrying Value	Accumulated Amortization	Carrying Value	Gross Carrying Value	Accumulated Amortization	Carrying Value
Intangible assets:						
Customer relationship and core deposit intangibles	$ 221	$ (216)	$ 5	$ 221	$ (214)	$ 7
Trade name	43	—	43	43	—	43
Intangible assets	$ 264	$ (216)	48	$ 264	$ (214)	50
Goodwill			172			172
Total			$ 220			$ 222

The following table presents the Bank's MSRs:

	June 30, 2022				December 31, 2021			
($ in millions)	Gross Carrying Value	Accumulated Amortization	Valuation Allowance	Carrying Value	Gross Carrying Value	Accumulated Amortization	Valuation Allowance	Carrying Value
MSRs	$ 130	$ (117)	$ —	$ 13	$ 131	$ (115)	$ —	$ 16

Refer to Note 5, "Mortgage Banking Activities," for further information about MSRs.

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 Value		Interest Expense			
			Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	June 30, 2022	December 31, 2021	2022	2021	2022	2021
Short-term borrowings:						
FHLB advances [1]	$ 6,300	$ —	$ 9	$ —	$ 9	$ —
Long-term debt:						
FHLB advances	4,700	3,700	11	36	20	76
Senior notes [2]	499	998	4	6	10	12
Subordinated notes [2]	779	779	9	9	18	18
Total long-term debt	5,978	5,477	24	51	48	106
Total borrowings	$ 12,278	$ 5,477	$ 33	$ 51	$ 57	$ 106

(1) At June 30, 2022, the weighted average interest rate of our short-term borrowings, which consisted of short-term FHLB advances, was 2.18%. At December 31, 2021, the Bank had no short-term borrowings.

(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 June 30, 2022, the Bank had $6.3 billion of short-term FHLB advances. At June 30, 2022, all of the long-term FHLB advances were fixed-rate for a specific term. At June 30, 2022, the contractual maturities and weighted average contractual rates of long-term FHLB advances were as follows:

	June 30, 2022	
($ in millions)	Amount	Rate
FHLB advances maturing in:		
July 1 - December 31, 2022	$ —	— %
2023	2,225	1.49 %
2024	1,275	1.26 %
2025	800	0.88 %
2026	400	0.65 %
2027 and thereafter	—	— %
Total	$ 4,700	1.25 %

The Bank had no prepaid FHLB advances for the quarter and six months ended June 30, 2022, compared to $1.5 billion and $2.8 billion for the quarter and six months ended June 30, 2021, respectively. Prepayment penalties for FHLB advances, which are included in other noninterest expense, were $5 million and $10 million for the quarter and six months ended June 30, 2021, respectively.

In connection with outstanding FHLB advances, at June 30, 2022 and December 31, 2021, the Bank owned FHLB stock of $297 million and $115 million, respectively. At both June 30, 2022 and December 31, 2021, 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 principal balances, carrying values, coupon rates, optional redemption dates and maturity dates of the Bank's unsecured, term, fixed-to-floating rate senior notes, and fixed-rate subordinated notes as of June 30, 2022. The 2.500% Senior Notes due 2022 with a principal balance of $500 million were redeemed in the second quarter of 2022, and, therefore, were no longer outstanding as of June 30, 2022.

	June 30, 2022				
($ in millions)	Principal Balance	Carrying Value [1]	Rate	Optional Redemption Date [2]	Maturity Date [3]
Senior notes:					
Fixed-to-floating rate, issued February 2020	$ 500	$ 499	1.912% [4]	February 12, 2023	February 12, 2024
Subordinated notes:					
Fixed-rate, issued August 2016	$ 400	$ 389	4.375 %	February 1, 2046	August 1, 2046
Fixed-rate, issued February 2017	$ 400	$ 390	4.625 %	August 13, 2046	February 13, 2047

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

Available Borrowing Capacity

Our unused, available borrowing capacity at the FHLB and the Federal Reserve Bank discount window at June 30, 2022 was $55.7 billion and $4.2 billion, respectively. This available borrowing capacity is supported by pledged loans at the FHLB and investment securities at the Federal Reserve Bank.

Note 10. Derivative Financial Instruments

The Bank has freestanding derivative assets and liabilities and currently does not have any derivatives designated as hedging instruments. The Bank recognizes all derivatives on the balance sheet at fair value, with changes in fair value recognized in earnings. The Bank has elected to present its derivative assets and derivative liabilities on a gross basis on its balance sheet. The Bank does not conduct proprietary trading activities in derivative instruments for its own account.

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

($ in millions)	June 30, 2022 Notional or Contractual Amount	June 30, 2022 Fair Value Derivative Assets [1]	June 30, 2022 Fair Value Derivative Liabilities [1]	December 31, 2021 Notional or Contractual Amount	December 31, 2021 Fair Value Derivative Assets [1]	December 31, 2021 Fair Value Derivative Liabilities [1]
Foreign exchange contracts	$ 6,946	$ 116	$ 127	$ 5,505	$ 37	$ 31

[1] Derivative assets are included in other assets and derivative liabilities are 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:

($ in millions)	Total: Gross Amounts Recognized	Contracts Not Subject to Master Netting Arrangements: Gross Amounts Recognized	Contracts Subject to Master Netting Arrangements: Gross Amounts Recognized	Gross Amounts Offset on the Balance Sheet	Net Amounts Presented on the Balance Sheet	Gross Amounts Not Offset on the Balance Sheet: Derivative Amount	Gross Amounts Not Offset on the Balance Sheet: Cash Collateral [1]	Net Amount
June 30, 2022								
Derivative assets:								
Foreign exchange contracts	$ 116	$ 18	$ 98	$ —	$ 98	$ 40	$ 58	$ —
Derivative liabilities:								
Foreign exchange contracts	$ 127	$ 87	$ 40	$ —	$ 40	$ 40	$ —	$ —
December 31, 2021								
Derivative assets:								
Foreign exchange contracts	$ 37	$ 8	$ 29	$ —	$ 29	$ 10	$ 17	$ 2
Derivative liabilities:								
Foreign exchange contracts	$ 31	$ 21	$ 10	$ —	$ 10	$ 10	$ —	$ —

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

Note 11. Fair Value Measurements

The Bank uses fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Under ASC 820, "Fair Value Measurement," fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Debt securities available-for-sale, 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: For most debt securities, the Bank uses quoted prices obtained through third-party valuation sources. Valuation techniques are generally 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. For level 3 taxable municipal securities, the Bank estimates the fair value using discounted expected future cash flows and applies a liquidity risk yield premium to account for liquidity considerations since the bond is not publicly traded. The weighted average liquidity risk yield premium, which is a significant unobservable input, was 50 bps as of both June 30, 2022 and December 31, 2021. 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. In addition, 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.

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. The Bank uses current market prices to determine the fair value of foreign exchange contracts.

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

($ in millions)	Level 1	Level 2	Level 3	Total
June 30, 2022				
Assets:				
Debt securities available-for-sale:				
Agency residential MBS	$ —	$ 2,071	$ —	$ 2,071
Other residential MBS	—	12	—	12
Agency commercial MBS	—	1,308	—	1,308
Securities of U.S. states and political subdivisions—taxable	—	—	47	47
Equity securities (fair value):				
Mutual funds and marketable equity securities	23	—	—	23
Derivative assets	—	116	—	116
Total	$ 23	$ 3,507	$ 47	$ 3,577
Liabilities:				
Derivative liabilities	$ —	$ 127	$ —	$ 127

($ in millions)	Level 1	Level 2	Level 3	Total
December 31, 2021				
Assets:				
Debt securities available-for-sale:				
Agency residential MBS	$ —	$ 1,829	$ —	$ 1,829
Other residential MBS	—	15	—	15
Agency commercial MBS	—	1,490	—	1,490
Securities of U.S. states and political subdivisions—taxable	—	—	47	47
Equity securities (fair value):				
Mutual funds and marketable equity securities	28	—	—	28
Derivative assets	—	37	—	37
Total	$ 28	$ 3,371	$ 47	$ 3,446
Liabilities:				
Derivative liabilities	$ —	$ 31	$ —	$ 31

There were no transfers in or out of Level 3 assets measured at fair value on a recurring basis in the quarters and six months ended June 30, 2022 and 2021.

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.

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.

The following table presents the assets measured at fair value on a nonrecurring basis that were held on the balance sheet:

($ in millions)	Level 1	Level 2	Level 3	Total
June 30, 2022				
Loans	$ —	$ —	$ 8	$ 8
December 31, 2021				
Loans	$ —	$ —	$ 8	$ 8
MSRs	—	—	11	11
Total	$ —	$ —	$ 19	$ 19

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

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	2022	2021	2022	2021
Loans	$ (1)	$ —	$ (1)	$ —
MSRs	—	—	—	(1)
Total	$ (1)	$ —	$ (1)	$ (1)

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:

	June 30, 2022				
	Carrying Value	Fair Value			
($ in millions)		**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:					
Cash and cash equivalents	$ 6,237	$ 6,237	$ 6,237	$ —	$ —
Debt securities held-to-maturity, net: [1]					
U.S. Government-sponsored agency securities	165	148	—	148	—
Agency residential MBS	1,794	1,637	—	1,637	—
Other residential MBS	8	8	—	8	—
Agency commercial MBS	5,399	5,018	—	5,018	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	17,135	14,728	—	14,702	26
Tax-exempt nonprofit debentures	71	70	—	—	70
Taxable municipal securities	1,725	1,386	—	1,386	—
Corporate debt securities	1,413	1,085	—	1,085	—
Loans, net: [1]					
Real estate secured mortgages	122,236	108,451	—	78,921	29,530
Other loans	28,554	25,917	—	—	25,917
Other assets:					
MSRs	13	22	—	—	22
FHLB stock	297	297	—	—	297
Liabilities:					
Deposits:					
CDs	$ 6,987	$ 6,971	$ —	$ —	$ 6,971
Short-term FHLB advances	6,300	6,296	—	6,296	—
Long-term FHLB advances	4,700	4,522	—	4,522	—
Senior notes	499	493	—	493	—
Subordinated notes	779	722	—	722	—

[1] Carrying value is presented net of ACL.

	December 31, 2021				
		Fair Value			
($ in millions)	Carrying Value	Total	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 12,947	$ 12,947	$ 12,947	$ —	$ —
Debt securities held-to-maturity, net: [(1)]					
U.S. Government-sponsored agency securities	100	97	—	97	—
Agency residential MBS	1,380	1,378	—	1,378	—
Other residential MBS	9	9	—	9	—
Agency commercial MBS	2,719	2,742	—	2,742	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	15,003	15,987	—	15,959	28
Tax-exempt nonprofit debentures	72	73	—	—	73
Taxable municipal securities	1,631	1,697	—	1,697	—
Corporate debt securities	1,378	1,439	—	1,439	—
Loans, net: [(1)]					
Real estate secured mortgages	106,401	103,269	—	74,708	28,561
Other loans	27,861	26,000	—	—	26,000
Other assets:					
MSRs	16	20	—	—	20
FHLB stock	115	115	—	—	115
Liabilities:					
Deposits:					
CDs	$ 7,357	$ 7,376	$ —	$ —	$ 7,376
Long-term FHLB advances	3,700	3,687	—	3,687	—
Senior notes	998	1,007	—	1,007	—
Subordinated notes	779	983	—	983	—

(1) Carrying value is presented net of ACL.

Note 12. Commitments and Contingencies

In the ordinary course of business, the Bank enters into transactions that involve financial instruments with off-balance sheet risks to meet the financing needs of the Bank's clients. These financial instruments include commitments to disburse additional funds on existing loans and lines of credit and commitments issued under standby letters of credit. Such instruments involve elements of credit risk and interest rate risk. These financial instruments are subject to the same underwriting standards as on-balance sheet instruments. The Bank generally requires collateral or other security to support instruments with credit risk. The maximum credit risk for such commitments will generally be lower than the contractual amount because a significant portion of these commitments is not expected to be fully used or will expire without being used by the client.

The Bank's commitments to disburse additional funds on existing loans and lines of credit are legally binding lending commitments, which are available for funding as long as there is no violation of any of several credit or other established conditions. Standby letters of credit are conditional lending commitments issued by the Bank to guarantee the performance of a client to a third party. Commitments to disburse additional funds and standby letters of credit generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since these commitments may expire without being drawn, the total commitment amounts do not necessarily represent future cash requirements. At June 30, 2022 and December 31, 2021, the Bank had commitments to disburse additional funds on existing loans and lines of credit of $43.6 billion and $38.5 billion, respectively, and had undisbursed standby letters of credit of $1.2 billion and $1.1 billion, respectively.

In connection with the securitization of loans with Freddie Mac, the Bank has an obligation to reimburse Freddie Mac for losses up to $30 million, or 12%, of the multifamily loans securitized. There was no liability for estimated losses related to this reimbursement obligation at June 30, 2022 and December 31, 2021, and the Bank has experienced no cumulative losses through June 30, 2022. The remaining unpaid principal balance of multifamily loans securitized was $53 million and $71 million at June 30, 2022 and December 31, 2021, respectively.

The Bank has been named as a defendant in legal actions arising in the ordinary course of business, none of which, in the opinion of management, are material.

Note 13. Preferred Stock

At June 30, 2022, the Bank was authorized to issue 25,000,000 shares of preferred stock, par value $0.01 per share, of which 3,632,500 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 and carrying value for each series of the Bank's preferred stock:

		June 30, 2022			December 31, 2021		
(in millions, except share amounts)	Dividend Rate	Shares Authorized	Shares Issued and Outstanding	Carrying Value	Shares Authorized	Shares Issued and Outstanding	Carrying Value
Series H Preferred Stock	5.125 %	200,000	200,000	$ 200	200,000	200,000	$ 200
Series I Preferred Stock	5.50 %	300,000	300,000	300	300,000	300,000	300
Series J Preferred Stock	4.70 %	400,000	395,000	395	400,000	395,000	395
Series K Preferred Stock	4.125 %	500,000	500,000	500	500,000	500,000	500
Series L Preferred Stock	4.250 %	747,500	747,500	748	747,500	747,500	748
Series M Preferred Stock	4.000 %	750,000	750,000	750	750,000	750,000	750
Series N Preferred Stock	4.500 %	747,500	740,000	740	747,500	740,000	740
Total			3,632,500	$ 3,633		3,632,500	$ 3,633

Dividends on each series of preferred stock are payable quarterly in arrears when, as and if declared by the Board (or a duly authorized committee of the Board). If declared, dividends on the Series H Preferred Stock and Series I Preferred Stock are paid each March 30, June 30, September 30 and December 30. Additionally, dividends on the Series J Preferred Stock, Series K Preferred Stock, Series L Preferred Stock, Series M Preferred Stock and Series N Preferred Stock are paid each January 30, April 30, July 30 and October 30.

The following table presents dividends on the Bank's preferred stock:

	Quarter Ended June 30,				Six Months Ended June 30,			
	2022		2021		2022		2021	
(in millions, except per share amounts)	Total	Per Share	Total	Per Share	Total	Per Share	Total	Per Share
Series G Preferred Stock	$ —	$ —	$ 0	$ 0.15	$ —	$ —	$ 2	$ 13.75
Series H Preferred Stock	2	$ 12.81	2	$ 12.81	5	$ 25.63	5	$ 25.63
Series I Preferred Stock	4	$ 13.75	4	$ 13.75	8	$ 27.50	8	$ 27.50
Series J Preferred Stock	5	$ 11.75	5	$ 11.75	10	$ 23.50	10	$ 23.50
Series K Preferred Stock	5	$ 10.31	5	$ 10.31	10	$ 20.63	10	$ 20.63
Series L Preferred Stock	8	$ 10.63	7	$ 9.56	16	$ 21.25	7	$ 9.56
Series M Preferred Stock	8	$ 10.00	—	$ —	15	$ 20.00	—	$ —
Series N Preferred Stock	9	$ 11.25	—	$ —	14	$ 18.88	—	$ —
Total	$ 41		$ 23		$ 78		$ 42	

Note 14. Common Stock and Stock Plans

Common Stock

At June 30, 2022, the Bank was authorized to issue 400,000,000 shares of common stock, par value $0.01 per share. At June 30, 2022, the Bank had 180,108,932 shares issued and outstanding. Refer to Note 20, "Subsequent Events," for information regarding the Bank's offering of 2,587,500 new shares of common stock in August 2022.

First Republic Bank Employee Stock Purchase Plan

Under the Bank's ESPP, the Bank is authorized to sell shares of common stock to its full-time and part-time employees who are regularly employed for 20 hours or more per week. See Note 18 in Part II, "Item 8. Financial Statements and Supplementary Data" of our 2021 Form 10-K for additional description of the ESPP. As of June 30, 2022, the Bank had 441,485 shares reserved for future purchase under the ESPP.

First Republic Bank 2017 Omnibus Award Plan

In May 2022, the Bank amended the 2017 Omnibus Award Plan to increase the number of shares reserved for issuance by an additional 3,500,000 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 June 30, 2022, the Bank had 4,004,475 shares reserved for future stock award grants.

Restricted Stock Units

RSUs have time-based vesting requirements ("Time RSUs") or both time-based and performance-based vesting requirements ("Performance RSUs"). 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, 2021	3,019,706	$ 137.32		471,506	$ 137.93	
Granted	1,126,610	$ 146.75		150,845	$ 166.36	
Vested	(576,791)	$ 133.42		(199,779)	$ 125.93	
Forfeited	(157,396)	$ 138.10		(3,085)	$ 134.74	
Nonvested awards as of June 30, 2022	3,412,129	$ 141.06	3.5 years	419,487	$ 153.89	1.8 years

The total fair value of Performance RSUs and Time RSUs that vested in the six months ended June 30, 2022 was $84 million and $33 million, respectively.

Performance Share Units

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, 2021	1,022,225	$ 129.17	
Granted	193,077	$ 161.77	
Vested	(89,400)	$ 99.75	
Forfeited	(101,150)	$ 128.44	
Nonvested awards as of June 30, 2022	1,024,752	$ 137.95	1.5 years

The total fair value of PSUs that vested for the six months ended June 30, 2022 was $12 million.

Compensation Expense

The following tables present information regarding share-based compensation expense for RSUs and PSUs:

	Quarter Ended June 30,				Six Months Ended June 30,			
	2022		2021		2022		2021	
($ in millions)	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit
RSUs	$ 41	$ 11	$ 43	$ 12	$ 76	$ 21	$ 75	$ 21
PSUs	11	2	12	2	14	1	23	4
Total	$ 52	$ 13	$ 55	$ 14	$ 90	$ 22	$ 98	$ 25

	June 30, 2022	
($ in millions)	Unrecognized Expense	Weighted Average Expected Recognition Period
RSUs	$ 456	3.5 years
PSUs	64	2.0 years
Total	$ 520	

Excess Tax Benefits

Excess tax benefits from exercise or vesting of share-based awards totaled $3 million and $6 million for the quarter and six months ended June 30, 2022, respectively, and $19 million and $22 million for the quarter and six months ended June 30, 2021, respectively.

Note 15. Accumulated Other Comprehensive Income (Loss)

The following table presents the changes in the components of accumulated other comprehensive income (loss), which relate to debt securities available-for-sale:

($ in millions)	At or for the Quarter Ended June 30, 2022	At or for the Quarter Ended June 30, 2021	At or for the Six Months Ended June 30, 2022	At or for the Six Months Ended June 30, 2021
Beginning balance	**$ (137)**	**$ (21)**	**$ (31)**	**$ 23**
Net unrealized gain (loss) on debt securities available-for-sale	(129)	16	(279)	(47)
Related tax effect	39	(5)	83	14
Other comprehensive income (loss)	(90)	11	(196)	(33)
Ending balance	**$ (227)**	**$ (10)**	**$ (227)**	**$ (10)**

Note 16. Income Taxes

The following table presents the reconciliation between the effective tax rate and the federal statutory rate:

Effective Tax Rate	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Statutory rate	21.0 %	21.0 %	21.0 %	21.0 %
State taxes, net of federal benefits	8.4	8.1	8.4	8.1
Tax-exempt income	(5.4)	(5.7)	(5.5)	(5.7)
Investments in life insurance	(0.4)	(1.0)	(0.5)	(0.9)
Tax credits	(8.8)	(10.6)	(9.2)	(10.9)
Tax credit investment amortization	7.8	9.5	8.1	9.8
Excess tax benefits—stock awards	(0.6)	(4.3)	(0.6)	(2.5)
FDIC assessments	0.6	0.6	0.6	0.6
Tax refund from an amended tax return	—	(0.9)	—	(0.5)
Other, net	0.8	0.7	0.8	0.6
Effective tax rate	23.4 %	17.4 %	23.1 %	19.6 %

Note 17. Earnings Per Common Share

The following table presents a reconciliation of the income and share amounts used in the basic and diluted EPS computations. Stock awards that are anti-dilutive are not included in the calculation of diluted EPS.

	Quarter Ended June 30,		Six Months Ended June 30,	
(in millions, except per share amounts)	**2022**	**2021**	**2022**	**2021**
Basic EPS:				
Net income	$ 433	$ 373	$ 834	$ 708
Less: Dividends on preferred stock	41	23	78	42
Net income available to common shareholders	$ 392	$ 350	$ 756	$ 666
Weighted average common shares outstanding	180	176	180	176
Basic EPS	$ 2.18	$ 1.98	$ 4.21	$ 3.79
Diluted EPS:				
Net income available to common shareholders	$ 392	$ 350	$ 756	$ 666
Weighted average shares:				
Common shares outstanding	180	176	180	176
Dilutive effect of RSUs and PSUs	1	3	2	2
Weighted average diluted common shares outstanding	181	179	182	178
Diluted EPS	$ 2.16	$ 1.95	$ 4.17	$ 3.74

Note 18. 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 June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Noninterest income:				
Revenue from contracts with customers:				
Investment management fees	$ 164	$ 136	$ 329	$ 255
Brokerage and investment fees	30	15	49	28
Insurance fees	3	3	7	6
Trust fees	7	6	14	12
Deposit fees	8	7	14	13
Other	2	2	4	4
Total revenue from contracts with customers	214	169	417	318
Other sources of noninterest income	49	57	97	104
Total noninterest income	$ 263	$ 226	$ 514	$ 422

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 $25 million and $22 million at June 30, 2022 and December 31, 2021, respectively, and consist primarily of investment management, brokerage and trust receivables, which are included in other assets on the consolidated balance sheets.

Note 19. 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 from investments in life insurance. 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 life insurance policies and annuity contracts through FRSC; (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.

Provision for income taxes for the segments is presented based on the segment’s contribution to total consolidated provision for income taxes. Tax preference items are allocated to the segment responsible for the related investments resulting in the tax preference item.

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.

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

($ in millions)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At or for the Quarter Ended June 30, 2022				
Net interest income	$ 1,156	$ 90	$ —	$ 1,246
Provision for credit losses	31	—	—	31
Noninterest income:				
Noninterest income from contracts with customers [1]	8	210	(4)	214
Other noninterest income	21	28	—	49
Total noninterest income	29	238	(4)	263
Noninterest expense	698	219	(4)	913
Income before provision for income taxes	456	109	—	565
Provision for income taxes	100	32	—	132
Net income	$ 356	$ 77	$ —	$ 433
At or for the Quarter Ended June 30, 2021				
Net interest income	$ 957	$ 46	$ —	$ 1,003
Provision for credit losses	16	—	—	16
Noninterest income:				
Noninterest income from contracts with customers [1]	7	174	(12)	169
Other noninterest income	34	23	—	57
Total noninterest income	41	197	(12)	226
Noninterest expense	604	170	(12)	762
Income before provision for income taxes	378	73	—	451
Provision for income taxes	58	20	—	78
Net income	$ 320	$ 53	$ —	$ 373

[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 millions)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At or for the Six Months Ended June 30, 2022				
Net interest income	$ 2,213	$ 178	$ —	$ 2,391
Provision for credit losses	41	—	—	41
Noninterest income:				
Noninterest income from contracts with customers [(1)]	14	411	(8)	417
Other noninterest income	43	54	—	97
Total noninterest income	57	465	(8)	514
Noninterest expense	1,346	441	(8)	1,779
Income before provision for income taxes	883	202	—	1,085
Provision for income taxes	192	59	—	251
Net income	$ 691	$ 143	$ —	$ 834
At or for the Six Months Ended June 30, 2021				
Net interest income	$ 1,855	$ 87	$ —	$ 1,942
Provision for credit losses	1	—	—	1
Noninterest income:				
Noninterest income from contracts with customers [(1)]	13	327	(22)	318
Other noninterest income	62	42	—	104
Total noninterest income	75	369	(22)	422
Noninterest expense	1,167	338	(22)	1,483
Income before provision for income taxes	762	118	—	880
Provision for income taxes	139	33	—	172
Net income	$ 623	$ 85	$ —	$ 708

(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 following table presents the goodwill and total assets of the Bank's two reportable segments, as well as any reconciling items:

($ in millions)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At June 30, 2022				
Goodwill	$ 25	$ 147	$ —	$ 172
Total assets	$ 197,156	$ 1,368	$ (616)	$ 197,908
At June 30, 2021				
Goodwill	$ 25	$ 147	$ —	$ 172
Total assets	$ 160,889	$ 1,301	$ (543)	$ 161,647

Note 20. Subsequent Events

The Bank evaluated the effects of events that have occurred subsequent to the quarter ended June 30, 2022.

In August 2022, the Bank offered and sold an aggregate of 2,587,500 new shares of common stock in an underwritten public offering. Net proceeds based on the public offering price, after underwriting discounts and estimated expenses, were $402 million.

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

Introduction

We earn income from the following principal areas: (1) net interest income, which is our largest source of income, and which 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, brokerage, insurance, trust 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) income from investments in life insurance. We currently operate our business through two business segments: Commercial Banking and Wealth Management.

Averages presented are daily averages unless otherwise indicated.

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 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 Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 Form 10-K") and in any of the Bank's subsequent Exchange Act filings.

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;

- Expectations regarding our executive transitions;
- 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;
- Natural or other disasters, including earthquakes, wildfires, pandemics or acts of terrorism affecting the markets in which we operate;
- The adverse effects of climate change on our business, clients and counterparties;
- 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;
- Inflation;
- 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;
- The regulatory environment in which we operate, our regulatory compliance and future regulatory requirements, which may result in costs, fees, penalties, business restrictions, reputational harm or other adverse consequences;
- 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 2021 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.

Non-GAAP Financial Measures

Our management uses and believes that investors benefit from using certain non-GAAP measures of our financial performance, which include tangible book value per common share, return on average tangible common shareholders' equity, and net interest income on a fully taxable-equivalent basis. Management believes that tangible book value per common share and return on average tangible common shareholders' equity are useful additional measures to evaluate our performance and capital position without the impact of goodwill and other intangible assets and preferred stock. In addition, to facilitate relevant comparisons of net interest income from taxable and tax-exempt interest-earning assets, when calculating yields and net interest margin, we adjust interest income on tax-exempt securities and tax-advantaged loans so such amounts are fully equivalent to interest income on taxable sources. We believe that these non-GAAP financial measures, when taken together with the corresponding GAAP financial measures, provide meaningful supplemental information that is not otherwise required by GAAP or other applicable requirements. These non-GAAP financial measures should be considered in addition to, not as a substitute for, financial measures prepared in accordance with GAAP. A reconciliation of the non-GAAP calculation of the financial measure to the most comparable GAAP financial measure is presented in relevant tables under "—Liquidity and Capital Resources—Return on Average Common Shareholders' Equity and Return on Average Tangible Common Shareholders' Equity," "—Liquidity and Capital Resources—Book Value per Common Share and Tangible Book Value per Common Share," and "Results of Operations—Quarter and Six Months Ended June 30, 2022, Compared to Quarter and Six Months Ended June 30, 2021—Net Interest Income and Net Interest Margin."

Selected Financial Data

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

($ in millions, except per share amounts)	At or for the Quarter Ended June 30, 2022	At or for the Quarter Ended June 30, 2021	At or for the Six Months Ended June 30, 2022	At or for the Six Months Ended June 30, 2021
Selected Financial Data:				
Interest income	$ 1,316	$ 1,078	$ 2,505	$ 2,100
Interest expense	70	75	114	158
Net interest income	1,246	1,003	2,391	1,942
Provision for credit losses	31	16	41	1
Net interest income after provision for credit losses	1,215	987	2,350	1,941
Noninterest income	263	226	514	422
Noninterest expense	913	762	1,779	1,483
Net income	433	373	834	708
Dividends on preferred stock	41	23	78	42
Net income available to common shareholders	$ 392	$ 350	$ 756	$ 666
Selected Ratios:				
Basic EPS	$ 2.18	$ 1.98	$ 4.21	$ 3.79
Diluted EPS	$ 2.16	$ 1.95	$ 4.17	$ 3.74
Return on average assets [(1), (2)]	0.91 %	0.92 %	0.90 %	0.91 %
Return on average common shareholders' equity [(1), (3)]	12.43 %	12.77 %	12.17 %	12.54 %
Return on average tangible common shareholders' equity [(1), (4)]	12.65 %	13.04 %	12.39 %	12.81 %
Average equity to average assets	8.52 %	8.10 %	8.60 %	8.11 %
Dividends per common share	$ 0.27	$ 0.22	$ 0.49	$ 0.42
Dividend payout ratio	12.5 %	11.3 %	11.8 %	11.2 %
Net interest margin [(1)]	2.80 %	2.68 %	2.74 %	2.67 %
Efficiency ratio [(5)]	60.5 %	62.0 %	61.2 %	62.7 %
Selected Asset Quality Ratios:				
Net loan charge-offs (recoveries) to average total loans [(1)]	0.00 %	0.00 %	0.00 %	0.00 %
Selected Asset Quality Ratios (period-end):				
Nonperforming assets to total assets	0.07 %	0.08 %		
Allowance for loan credit losses to total loans	0.48 %	0.52 %		
Allowance for loan credit losses to nonaccrual loans	531.2 %	479.3 %		
Selected Ratios (period-end):				
Book value per common share	$ 71.03	$ 62.99		
Tangible book value per common share [(6)]	$ 69.81	$ 61.72		
Capital Ratios (period-end):				
Tier 1 leverage ratio	8.59 %	8.05 %		
CET1 ratio	9.15 %	9.51 %		
Tier 1 risk-based capital ratio	11.75 %	11.38 %		
Total risk-based capital ratio	12.82 %	12.60 %		

(1) Ratios are annualized.

(2) Return on average assets is the ratio of net income to average assets.

(3) Return on average common shareholders' equity is the ratio of net income available to common shareholders to average common shareholders' equity.

(4) Refer to table in "—Liquidity and Capital Resources—Return on Average Common Shareholders' Equity and Return on Average Tangible Common Shareholders' Equity" for a reconciliation of this non-GAAP financial measure to the most comparable GAAP measure.

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

(6) Refer to table in "—Liquidity and Capital Resources—Book Value per Common Share and Tangible Book Value per Common Share" for a reconciliation of this non-GAAP financial measure to the most comparable GAAP measure.

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 disclosures. On an ongoing basis, we evaluate our estimates, including those related to ACL on loans. We base these estimates on our historical experience and on various other 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. We consider the significant accounting policy below to be a critical accounting policy and estimate because of the significance to our financial condition and results of operations and the difficult and subjective judgments, assumptions and estimates involved. Actual results may differ from these estimates under different assumptions or conditions.

Allowance for Credit Losses on Loans

The Bank estimates its ACL using quantitative models, expert judgment, qualitative factors and individual assessments to determine the 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. For a complete description of the accounting policies for determining the Bank's ACL on loans, see Note 4 in "Item 1. Financial Statements" in this Quarterly Report on Form 10-Q and Note 1 in Part II, "Item 8. Financial Statements and Supplementary Data" of our 2021 Form 10-K.

Estimated loss amounts determined by the Bank's quantitative models are based on the macroeconomic forecast scenario, contractual maturity dates, 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 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 Bank's ACL measured using these quantitative models is sensitive to various factors, but the most impactful are residential home price indices, commercial real estate price indices, apartment price indices, unemployment rates, and interest rates.

The ACL determined by the quantitative models and associated qualitative reserve represents the largest portion of the Bank's total ACL on loans. To illustrate the impact of changes in these key variables to the Bank's ACL, the Bank performed a hypothetical sensitivity analysis that forecasted pessimistic trends in these variables over the two-year reasonable and supportable period. The following table presents the key variables used in estimating the Bank's ACL on loans for the period ended June 30, 2022 and the more pessimistic forecasted variables in the hypothetical sensitivity analysis.

	June 30, 2022 ACL Macroeconomic Forecast		Hypothetical Pessimistic Macroeconomic Forecast	
Key ACL variables	**Year 1**	**Year 2**	**Year 1**	**Year 2**
Home price index growth (decline)	4.1%	(0.3)%	(10.6)%	4.1%
Commercial real estate price index growth (decline)	8.3%	8.2%	(9.0)%	1.8%
Apartment price index growth (decline)	17.0%	(0.2)%	7.9%	1.5%
Unemployment rate	3.4%	3.6%	7.8%	6.4%
3-year CMT	3.02%	3.00%	2.20%	1.63%

The impact of this hypothetical pessimistic forecast would result in a net increase of $31 million, or approximately 4%, in the Bank's total ACL on loans as of June 30, 2022, primarily driven by a $47 million increase in ACL from the quantitative models, partially offset by a $16 million decrease in the qualitative reserve.

The hypothetical analysis is intended to illustrate the impact of adverse changes in the macroeconomic environment and is not intended to reflect the full nature and extent of potential future change in the ACL or even what the ACL would be under these adverse economic circumstances. It is difficult to estimate how potential changes in any one of the quantitative inputs or qualitative factors might affect the overall ACL and the Bank's current assessments may not reflect the potential future impact of changes to those inputs or factors.

Current Accounting Developments

The following ASUs have been issued by the FASB, but were not yet effective as of June 30, 2022:

ASU 2022-02—Financial Instruments—Credit Losses (ASC 326): Troubled Debt Restructurings and Vintage Disclosures

The amendments eliminate the accounting guidance on TDRs for entities that have adopted CECL and require enhanced disclosures about certain loan modifications made to borrowers experiencing financial difficulty. Under the amendments, entities should apply the existing accounting guidance for loan refinancing and restructuring to determine whether a modification results in a new loan or a continuation of an existing loan, rather than applying the accounting guidance for TDRs. For modifications in the form of interest rate reductions, principal forgiveness, other-than-insignificant payment delays or term extensions made to borrowers experiencing financial difficulty, enhanced disclosures include information about the type and magnitude of modifications and the degree of their success in mitigating potential credit losses in the 12-months following the modification. Additionally, the amendments require entities to present current-period gross write-offs by year of origination in their vintage disclosures.	The amendments are effective for interim and annual periods beginning January 1, 2023. The amendments should be applied prospectively, with an option to use a modified retrospective approach for amendments related to TDRs. If this option is elected, a cumulative effect adjustment to retained earnings in the period of adoption representing any change in ACL for TDRs should be recognized. Upon adoption, the Bank will no longer apply TDR accounting to loan modifications and will disclose additional information about modifications made to borrowers experiencing financial difficulty. The Bank will also disclose the current period gross write-offs in its vintage disclosures. The Bank is currently assessing the accounting and disclosures impact of the amendments to its financial statements.

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, such as loans and investment securities, and the interest expense incurred on interest-bearing liabilities, such as deposits and borrowings. The level of net interest income is driven by the volume, pricing and mix of interest-earning assets and interest-bearing liabilities which, in turn, may be impacted by external factors such as local economic conditions, competition for loans and deposits, the monetary policy of the FOMC, market liquidity and interest rates, or other factors.

The rates paid on our interest-bearing 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 influenced 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 magnitude or pace at which such movements occur. Declines in the yield curve or prolonged periods of flat or inverted yield curve could have an adverse impact on our net interest margin, net interest income, or both. The FOMC's actions can meaningfully influence the interest-rate environment, which may impact our net interest margin.

For additional information, see Part I, "Item 1A. Risk Factors—Market and Interest Rate Risk—We are subject to interest rate risk and fluctuations in interest rates may negatively impact our net interest income" in our 2021 Form 10-K and "Item 3. Quantitative and Qualitative Disclosures About Market Risk—Interest Rate Risk Management" 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 continue to evolve as the legal and regulatory framework changes and as our business grows. As described in our 2021 Form 10-K under "Item 1. Business—Supervision and Regulation—Capital Requirements," we are subject to regulatory requirements specifying minimum amounts and types of capital that we must maintain. In addition, although we are not subject to certain liquidity ratio requirements, we nevertheless maintain on-balance sheet liquidity and a portfolio of HQLA. Changes in regulation or continued growth of the Bank may cause us to be subject to more stringent capital and/or liquidity requirements. The timing, nature and impact of any future changes to legal and regulatory requirements cannot be predicted.

Additionally, as described in our 2021 Form 10-K under Part I, "Item 1. Business—Supervision and Regulation—COVID-19," there have been a number of regulatory actions and legislative changes enacted by the U.S. Government and adopted by California and other states intended to help mitigate the adverse economic impact of COVID-19. Further actions taken by U.S. or other governmental authorities may result in regulatory uncertainty and may impose additional restrictions or requirements. While such regulatory and legislative responses to COVID-19 have not had a materially negative impact on our business to date, we cannot predict the impact of any current or future regulatory or legislative responses on our business.

In addition to these regulatory and supervisory matters, our results of operations may be affected by other legislative developments or reforms, including bills that may be adopted by Congress with tax impact, and additional disclosure, risk management or other requirements implemented by our regulators or other governmental authorities. The adoption, details and timing of any such changes are uncertain, and the impact of any changes or developments 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. Economic conditions continue to be subject to rapid changes in response to ongoing COVID-19 developments, including the emergence of new variants of COVID-19 and new information regarding the efficacy of vaccines.

We actively monitor COVID-19 developments and continue to focus on the health and safety of our colleagues and clients. Our response to the pandemic has included: company-wide remote and hybrid working arrangements, social distancing and other measures to ensure the safety of our colleagues and clients, and community support through corporate contributions for those in need. We continue to follow applicable guidelines and ordinances throughout our organization.

See Part I, "Item 1A. Risk Factors—Risk Related to the COVID-19 Pandemic—COVID-19 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" in our 2021 Form 10-K for additional discussion of risks related to COVID-19.

Financial Highlights

Assets

- At June 30, 2022, total assets were $197.9 billion, a 9% increase compared to $181.1 billion at December 31, 2021 and a 22% increase compared to $161.6 billion at June 30, 2021. Asset growth was driven primarily by growth in loans and investments, partially offset by decreases in cash.

Investments

- At June 30, 2022, total investment securities were $31.2 billion, a 21% increase compared to $25.7 billion at December 31, 2021 and a 36% increase compared to $22.9 billion at June 30, 2021. Total investment securities represented 16% of total assets at June 30, 2022, compared to 14% at both December 31, 2021 and June 30, 2021. The increases in investment securities were primarily due to purchases of agency commercial MBS and municipal securities, partially offset by calls and paydowns. For additional discussion regarding our investment portfolio, see "—Balance Sheet Analysis—Investments."
- Our holdings of assets that are considered HQLA, including eligible cash, totaled $28.2 billion at June 30, 2022, compared to $30.4 billion at December 31, 2021 and $23.2 billion at June 30, 2021. At June 30, 2022, HQLA represented 15% of average total assets for the second quarter of 2022.

Loans

- At June 30, 2022, loans were $151.5 billion, a 12% increase compared to $135.0 billion at December 31, 2021 and a 23% increase compared to $123.1 billion at June 30, 2021. Loans increased from December 31, 2021 primarily as a result of growth in single family and multifamily loans, and increased during the last twelve months primarily as a result of growth in single family, multifamily, stock secured loans and capital call lines of credit, partially offset by a decrease in PPP loans. For additional discussion regarding our loan portfolio, see "—Balance Sheet Analysis—Loan Portfolio."

- Average loan balances were $146.1 billion for the second quarter of 2022, an increase of 21% compared to $120.7 billion for the second quarter of 2021, and were $141.7 billion for the six months ended June 30, 2022, compared to $117.7 billion for the six months ended June 30, 2021, an increase of 20%.
- Our single family mortgage loans, including HELOCs, were $92.0 billion and represented 61% of total loans at June 30, 2022, compared to $79.4 billion, or 59% of total loans at December 31, 2021 and $72.4 billion, or 59% of total loans at June 30, 2021.
- Loan origination volume was $22.0 billion for the second quarter of 2022, compared to $16.8 billion for the second quarter of 2021, an increase of 31%, and was $39.8 billion for the six months ended June 30, 2022, compared to $32.5 billion for the six months ended June 30, 2021, an increase of 23%. Loan originations increased for the quarter and six months ended June 30, 2022 primarily due to increases in single family and multifamily lending.

Deposits and Funding

- Total deposits were $165.6 billion at June 30, 2022, an increase of 6% compared to $156.3 billion at December 31, 2021, and an increase of 23% compared to $134.7 billion at June 30, 2021. Deposits were our primary source of funding and represented 93% of our funding base at June 30, 2022, compared to 97% at December 31, 2021 and 93% at June 30, 2021. 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 total deposit balances were $162.8 billion for the second quarter of 2022, an increase of 21% from $134.1 billion for the second quarter of 2021, and were $161.1 billion for the six months ended June 30, 2022, an increase of 25% from $129.4 billion for the six months ended June 30, 2021.
- At June 30, 2022, checking deposit balances were $118.6 billion, or 72% of total deposits, compared to $112.1 billion, or 72% of total deposits at December 31, 2021 and $91.6 billion, or 68% of total deposits at June 30, 2021.
- The following table presents percentages of business and consumer deposits:

Business and Consumer Deposits as a % of Total Deposits	June 30, 2022	December 31, 2021	June 30, 2021
Business deposits	64 %	60 %	61 %
Consumer deposits	36	40	39
Total	100 %	100 %	100 %

- Total deposits had an average rate paid of 0.09% for the second quarter of 2022 and 0.07% for the six months ended June 30, 2022, compared to 0.07% for the second quarter of 2021 and 0.08% for the six months ended June 30, 2021.
- Other sources of funding at June 30, 2022 included short-term FHLB advances of $6.3 billion and long-term FHLB advances of $4.7 billion, compared to long-term FHLB advances of $3.7 billion at December 31, 2021 and $9.0 billion at June 30, 2021. See "—Balance Sheet Analysis—Borrowings" for additional information.
- Average total funding costs (total deposits and borrowings) were 0.16% for the second quarter of 2022 and 0.14% for the six months ended June 30, 2022, compared to 0.20% for the second quarter of 2021 and 0.22% for the six months ended June 30, 2021.

Capital Markets Activity

- In August 2022, we sold 2,587,500 shares of common stock in an underwritten public offering. Net proceeds, after underwriting discounts and estimated expenses, were $402 million.

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

- Our Tier 1 leverage ratio at June 30, 2022 was 8.59%. We continue to exceed regulatory guidelines for well-capitalized institutions. See "—Liquidity and Capital Resources—Regulatory Capital Components and Ratios" for further discussion of capital ratios and our capital requirements.
- Book value per common share was $71.03 at June 30, 2022, a 4% increase from December 31, 2021 and a 13% increase during the last twelve months.
- Tangible book value per common share was $69.81 at June 30, 2022, a 4% increase from December 31, 2021 and a 13% increase during the last twelve months.

Dividends

- Cash dividends paid in the second quarter of 2022 were $0.27 per share of common stock to shareholders of record as of April 28, 2022, compared to $0.22 in the second quarter of 2021. Cash dividends paid in the six months ended June 30, 2022 were $0.49 per share of common stock, compared to $0.42 in the six months ended June 30, 2021.
- On July 14, 2022, we declared a cash dividend for the second quarter of 2022 of $0.27 per share, which is payable on August 11, 2022 to shareholders of record as of July 28, 2022. Any future payment of dividends will be subject to ongoing regulatory oversight and Board approval.

Wealth Management Assets

- Wealth management AUM and AUA were $246.8 billion at June 30, 2022, compared to $279.4 billion at December 31, 2021, a decrease of 12%, and $240.9 billion at June 30, 2021, an increase of 2%. The decrease in AUM and AUA from December 31, 2021 was due to market decline, partially offset by net client inflow. The increase in AUM and AUA during the last twelve months was due to net client inflow, partially offset by market decline. See "—Business Segments" for additional information.

Effective Tax Rate

- The Bank's effective tax rate was 23.4% and 23.1% for the quarter and six months ended June 30, 2022, compared to 17.4% and 19.6% for the quarter and six months ended June 30, 2021. See "—Results of Operations—Quarter and Six Months Ended June 30, 2022, Compared to Quarter and Six Months Ended June 30, 2021—Provision for Income Taxes" for additional information.

Results of Operations—Quarter and Six Months Ended June 30, 2022, Compared to Quarter and Six Months Ended June 30, 2021

Overview

Net income for the quarter and six months ended June 30, 2022 was $433 million and $834 million, compared to $373 million and $708 million for the quarter and six months ended June 30, 2021, respectively, an increase of 16% for the quarter and an increase of 18% for the six months. The increases were primarily due to higher net interest income and higher noninterest income, partially offset by higher noninterest expense and higher provision for credit losses. Diluted EPS for the quarter and six months ended June 30, 2022 were $2.16 and $4.17, compared to $1.95 and $3.74 for the quarter and six months ended June 30, 2021, respectively, an increase of 11% for both the quarter and six months.

Net income for the Commercial Banking segment was $356 million and $691 million for the quarter and six months ended June 30, 2022, compared to $320 million and $623 million for the quarter and six months ended June 30, 2021, respectively, an increase of 11% for both the quarter and six months. The Wealth Management segment's net income for the quarter and six months ended June 30, 2022 was $77 million and $143 million, compared to $53 million and $85 million for the quarter and six months ended June 30, 2021, respectively, an increase of 45% for the quarter and an increase of 68% for the six months. For a discussion of segment results, see "—Business Segments."

Net Interest Income and Net Interest Margin

Net interest income for the quarter and six months ended June 30, 2022 was $1.2 billion and $2.4 billion, compared to $1.0 billion and $1.9 billion for the quarter and six months ended June 30, 2021, respectively, an increase of 24% for the quarter and an increase of 23% for the six 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 six months ended June 30, 2022 was 2.80% and 2.74%, compared to 2.68% and 2.67% for the quarter and six months ended June 30, 2021, respectively. The increase for the quarter was primarily due to an increase in average yields on interest-earning assets and a decrease in average funding costs, as well as lower average cash balances. The increase for the six months was primarily due to a decrease in average funding costs.

On an average basis, interest-earning assets and interest-bearing liabilities for the second quarter of 2022 increased 18% and 9% from the second quarter a year ago, respectively. For the six months ended June 30, 2022, average interest-earning assets and interest-bearing liabilities increased 20% and 9% from the six months ended June 30, 2021, respectively. Average noninterest-bearing checking deposit balances, a significant source of our funding, increased 30% for the second quarter of 2022 and increased 35% for the six months ended June 30, 2022.

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. Nonaccrual loans are included in the average balances of loans and in the calculation of average loan yields.

	Quarter Ended June 30,					
	2022			2021		
($ in millions)	Average Balance	Interest Income/ Expense (1)	Yields/ Rates (2)	Average Balance	Interest Income/ Expense (1)	Yields/ Rates (2)
Assets:						
Interest-bearing deposits with banks	$ 5,713	$ 11	0.80 %	$ 11,281	$ 3	0.11 %
Investment securities:						
U.S. Government-sponsored agency securities	165	1	2.05 %	100	1	1.59 %
Agency residential and commercial MBS	10,667	56	2.10 %	5,646	29	2.05 %
Other residential and commercial MBS	22	0	2.37 %	30	0	2.04 %
Tax-exempt municipal securities	16,711	161	3.86 %	13,470	136	4.02 %
Taxable municipal securities	1,774	14	3.18 %	1,612	12	3.00 %
Other investment securities	1,440	10	2.87 %	1,376	9	2.85 %
Total investment securities	30,779	242	3.15 %	22,234	187	3.36 %
Loans:						
Residential real estate	89,358	620	2.78 %	69,854	491	2.81 %
Multifamily	17,480	153	3.46 %	14,392	127	3.49 %
Commercial real estate	8,983	85	3.77 %	8,117	78	3.82 %
Multifamily/commercial construction	2,004	24	4.60 %	2,969	38	5.00 %
Business	18,469	160	3.43 %	15,894	129	3.21 %
PPP	138	3	8.46 %	1,843	15	3.32 %
Other	9,628	56	2.31 %	7,653	42	2.15 %
Total loans	146,060	1,101	3.00 %	120,722	920	3.03 %
FHLB stock	201	2	3.40 %	312	5	6.55 %
Total interest-earning assets	182,753	1,356	2.96 %	154,549	1,115	2.87 %
Noninterest-earning assets:						
Noninterest-earning cash	442			386		
Goodwill and other intangibles	220			225		
Other assets	7,759			6,725		
Total noninterest-earning assets	8,421			7,336		
Total Assets	$ 191,174			$ 161,885		
Liabilities and Shareholders' Equity:						
Deposits:						
Interest-bearing checking	$ 41,878	5	0.05 %	$ 33,329	2	0.02 %
Money market checking	20,873	13	0.25 %	19,928	6	0.12 %
Money market savings and passbooks	17,682	11	0.25 %	14,783	6	0.17 %
CDs	6,975	8	0.43 %	8,040	10	0.51 %
Total interest-bearing deposits (3)	87,408	37	0.17 %	76,080	24	0.13 %
Borrowings:						
Federal funds purchased	186	0	0.73 %	—	—	— %
Short-term FHLB advances	2,953	9	1.20 %	—	—	— %
Long-term FHLB advances	4,097	11	1.09 %	10,062	36	1.39 %
Senior notes	691	4	2.38 %	997	6	2.42 %
Subordinated notes	779	9	4.68 %	778	9	4.68 %
Total borrowings	8,706	33	1.54 %	11,837	51	1.69 %
Total interest-bearing liabilities (4)	96,114	70	0.29 %	87,917	75	0.34 %
Noninterest-bearing checking	75,411			58,051		
Other noninterest-bearing liabilities	3,354			2,796		
Total noninterest-bearing liabilities	78,765			60,847		
Preferred shareholders' equity	3,633			2,143		
Common shareholders' equity	12,662			10,978		
Total Liabilities and Shareholders' Equity	$ 191,174			$ 161,885		
Net interest spread (5)			2.66 %			2.54 %
Net interest income (fully taxable-equivalent basis) and net interest margin (6)		$ 1,286	2.80 %		$ 1,040	2.68 %
Reconciliation of tax-equivalent net interest income to net interest income: (7)						
Municipal securities tax-equivalent adjustment		(33)			(30)	
Business loans tax-equivalent adjustment		(7)			(7)	
Net interest income		$ 1,246			$ 1,003	
Supplemental information:						
Total deposits (interest-bearing and noninterest-bearing)	$ 162,819	$ 37	0.09 %	$ 134,131	$ 24	0.07 %
Total deposits (interest-bearing and noninterest-bearing) and borrowings	$ 171,525	$ 70	0.16 %	$ 145,968	$ 75	0.20 %

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	Six Months Ended June 30,					
	2022			2021		
($ in millions)	Average Balance	Interest Income/ Expense (1)	Yields/ Rates (2)	Average Balance	Interest Income/ Expense (1)	Yields/ Rates (2)
Assets:						
Interest-bearing deposits with banks	$ 8,512	$ 16	0.39 %	$ 11,364	$ 6	0.11 %
Investment securities:						
U.S. Government-sponsored agency securities	141	1	1.76 %	97	1	1.52 %
Agency residential and commercial MBS	9,909	95	1.91 %	5,636	60	2.11 %
Other residential and commercial MBS	23	0	2.19 %	32	0	1.95 %
Tax-exempt municipal securities	16,156	309	3.83 %	12,874	263	4.08 %
Taxable municipal securities	1,744	27	3.07 %	1,347	20	2.98 %
Other investment securities	1,428	20	2.86 %	905	12	2.73 %
Total investment securities	29,401	452	3.08 %	20,891	356	3.40 %
Loans:						
Residential real estate	85,906	1,187	2.76 %	67,668	960	2.84 %
Multifamily	16,884	293	3.45 %	14,159	250	3.51 %
Commercial real estate	8,808	167	3.77 %	8,075	156	3.85 %
Multifamily/commercial construction	1,967	46	4.61 %	2,918	69	4.68 %
Business	18,529	305	3.27 %	15,488	253	3.24 %
PPP	259	10	7.82 %	1,916	31	3.24 %
Other	9,345	103	2.19 %	7,501	81	2.15 %
Total loans	141,698	2,111	2.97 %	117,725	1,800	3.05 %
FHLB stock	158	4	4.92 %	329	10	6.31 %
Total interest-earning assets	179,769	2,583	2.87 %	150,309	2,172	2.88 %
Noninterest-earning assets:						
Noninterest-earning cash	446			400		
Goodwill and other intangibles	221			226		
Other assets	7,452			6,409		
Total noninterest-earning assets	8,119			7,035		
Total Assets	$ 187,888			$ 157,344		
Liabilities and Shareholders' Equity:						
Deposits:						
Interest-bearing checking	$ 41,143	6	0.03 %	$ 32,664	4	0.02 %
Money market checking	21,264	18	0.17 %	19,411	14	0.14 %
Money market savings and passbooks	17,803	18	0.20 %	14,215	12	0.18 %
CDs	7,095	15	0.41 %	8,225	22	0.53 %
Total interest-bearing deposits (3)	87,305	57	0.13 %	74,515	52	0.14 %
Borrowings:						
Federal funds purchased	93	0	0.73 %	0	0	0.26 %
Short-term FHLB advances	1,485	9	1.20 %	0	0	0.15 %
Long-term FHLB advances	3,899	20	1.02 %	10,689	76	1.42 %
Senior notes	844	10	2.41 %	997	12	2.42 %
Subordinated notes	779	18	4.68 %	778	18	4.68 %
Total borrowings	7,100	57	1.62 %	12,464	106	1.71 %
Total interest-bearing liabilities (4)	94,405	114	0.24 %	86,979	158	0.36 %
Noninterest-bearing checking	73,840			54,887		
Other noninterest-bearing liabilities	3,483			2,717		
Total noninterest-bearing liabilities	77,323			57,604		
Preferred shareholders' equity	3,633			2,054		
Common shareholders' equity	12,527			10,707		
Total Liabilities and Shareholders' Equity	$ 187,888			$ 157,344		
Net interest spread (5)			2.63 %			2.52 %
Net interest income (fully taxable-equivalent basis) and net interest margin (6)		$ 2,469	2.74 %		$ 2,014	2.67 %
Reconciliation of tax-equivalent net interest income to net interest income: (7)						
Municipal securities tax-equivalent adjustment		(64)			(58)	
Business loans tax-equivalent adjustment		(14)			(14)	
Net interest income		$ 2,391			$ 1,942	
Supplemental information:						
Total deposits (interest-bearing and noninterest-bearing)	$ 161,145	$ 57	0.07 %	$ 129,402	$ 52	0.08 %
Total deposits (interest-bearing and noninterest-bearing) and borrowings	$ 168,245	$ 114	0.14 %	$ 141,866	$ 158	0.22 %

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Note: Certain prior period amounts have been reclassified to conform to the current period presentation.
(1) Interest income on tax-exempt securities and loans has been adjusted to the fully taxable-equivalent basis using the statutory federal income tax rate in effect for each respective period presented.
(2) Yields/rates are annualized.
(3) Refer to supplemental information in this table for average balances, interest expense and rates for total deposits (interest-bearing and noninterest-bearing).
(4) Refer to supplemental information in this table for average balances, interest expense and rates for total deposits (interest-bearing and noninterest-bearing) and borrowings.
(5) Net interest spread represents the average yield on interest-earning assets less the average rate on interest-bearing liabilities.
(6) Net interest margin represents net interest income on a fully taxable-equivalent basis divided by total average interest-earning assets.
(7) Fully taxable-equivalent net interest income is considered a non-GAAP financial measure, and is reconciled to GAAP net interest income in this table.

Interest Income

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

	Quarter Ended June 30,		Six Months Ended June 30,		% Change Quarter Ended June 30,	% Change Six Months Ended June 30,
($ in millions)	2022	2021	2022	2021	2022 vs. 2021	2022 vs. 2021
Interest income:						
Loans	$ 1,094	$ 913	$ 2,096	$ 1,786	20 %	17 %
Investments	209	157	389	298	33 %	31 %
Other [(1)]	2	5	4	10	(67)%	(62)%
Cash and cash equivalents	11	3	16	6	273 %	176 %
Total interest income	$ 1,316	$ 1,078	$ 2,505	$ 2,100	22 %	19 %
Fully taxable-equivalent interest income:						
Loans	$ 1,101	$ 920	$ 2,110	$ 1,800	20 %	17 %
Investments	$ 242	$ 187	$ 453	$ 355	30 %	27 %

(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. The increase in interest income for the second quarter of 2022 was the result of an increase of 18% in average interest-earning assets, which were $182.8 billion, compared to $154.5 billion for the second quarter of 2021, and an increase in the average yield on interest-earning assets to 2.96% from 2.87% for the second quarter of 2021. The increase for the six months ended June 30, 2022 was the result of an increase of 20% in average interest-earning assets, which were $179.8 billion, compared to $150.3 billion for the six months ended June 30, 2021, partially offset by a slight decrease in the average yield on interest-earning assets to 2.87% from 2.88% for the six months ended June 30, 2021.

Loans

Interest income on loans for the quarter and six months ended June 30, 2022 increased due to continued loan growth, partially offset by decreases in the average yield. Average loan balances increased 21% for the second quarter of 2022 and increased 20% for the six months ended June 30, 2022. The average yield on loans was 3.00% for the second quarter of 2022, compared to 3.03% for the second quarter of 2021, and was 2.97% for the six months ended June 30, 2022, compared to 3.05% for the six months ended June 30, 2021. The average yield on loans varies based on the volume, mix and pricing of the loan portfolio.

Interest income on loans included prepayment penalty fees of $8 million and $14 million for the quarter and six months ended June 30, 2022, compared to $4 million and $9 million for the quarter and six months ended June 30, 2021, respectively. The increases in these fees were primarily due to higher prepayments on multifamily and commercial real estate 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 3.14% at June 30, 2022, compared to 2.97% at December 31, 2021 and 3.02% at June 30, 2021. For ARMs, the yield is also affected by the timing of changes in the loan rates, which generally lag market rate changes. At June 30, 2022, approximately 23% of our total loans were adjustable-rate or mature within one year, compared to 26% at both December 31, 2021 and June 30, 2021, respectively.

Investments

Interest income on investments increased for the quarter and six months ended June 30, 2022 primarily due to higher average investment balances, partially offset by decreases in the average yield. Average investment balances increased 38% for the second quarter of 2022 and increased 41% for the six months ended June 30, 2022. The increases were primarily due to investment purchases, partially offset by calls and paydowns. The average yield on investment securities for the second quarter of 2022 was 3.15%, compared to 3.36% for the second quarter of 2021, and was 3.08% for the six months ended June 30, 2022, compared to 3.40% for the six months ended June 30, 2021.

Interest Expense

The following table presents interest expense:

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	% Change Quarter Ended June 30, 2022 vs. 2021	% Change Six Months Ended June 30, 2022 vs. 2021
Interest expense:						
Deposits:						
Interest-bearing checking	$ 5	$ 2	$ 6	$ 4	196 %	64 %
Money market checking	13	6	18	14	117 %	32 %
Money market savings and passbooks	11	6	18	12	80 %	43 %
CDs	8	10	15	22	(26)%	(33)%
Total interest expense on deposits	37	24	57	52	53 %	10 %
Borrowings:						
Short-term FHLB advances	9	—	9	—	100 %	100 %
Long-term FHLB advances	11	36	20	76	(68)%	(74)%
Senior notes	4	6	10	12	(32)%	(16)%
Subordinated notes	9	9	18	18	0 %	0 %
Total interest expense on borrowings	33	51	57	106	(33)%	(46)%
Total interest expense	$ 70	$ 75	$ 114	$ 158	(5)%	(27)%

Total interest expense consists of interest expense on deposits and borrowings. The decrease in interest expense for the second quarter of 2022 was the result of a decline in the average cost of interest-bearing liabilities to 0.29% for the second quarter of 2022 from 0.34% for the second quarter of 2021, partially offset by an increase of 9% in average interest-bearing liabilities for the second quarter of 2022. The decrease for the six months ended June 30, 2022 was the result of a decline in the average cost of interest-bearing liabilities to 0.24% for the six months ended June 30, 2022 from 0.36% for the six months ended June 30, 2021, partially offset by an increase of 9% in average interest-bearing liabilities for the six months ended June 30, 2022.

Deposits

Interest expense on deposits increased for the quarter and six months ended June 30, 2022 due to growth in average deposit balances. Additionally, interest expense on deposits increased for the quarter ended June 30, 2022 due to an increase in average rates paid on deposits. The average interest rate paid on total deposits was 0.09% and 0.07% for the second quarter of 2022 and 2021, and was 0.07% and 0.08% for the six months ended June 30, 2022 and 2021, respectively. The average rates paid on deposits were impacted by the level of the federal funds rate, which averaged 0.96% and 0.63% for the quarter and six months ended June 30, 2022, respectively, compared to 0.25% for both the quarter and six months ended June 30, 2021.

Interest-bearing checking. Interest expense on checking deposits increased for the quarter and six months ended June 30, 2022 due to increases in average balances and increases in average rates paid on interest-bearing checking deposits.

Total checking (interest-bearing and noninterest-bearing). The average interest rate paid on total checking deposits was 0.02% and 0.01% for the quarter and six months ended June 30, 2022, respectively, compared to 0.01% for both the quarter and six months ended June 30, 2021. Average total checking deposit balances increased 28% for the second quarter of 2022 and increased 31% for the six months ended June 30, 2022.

Money market checking. Interest expense on money market checking deposits increased for the quarter and six months ended June 30, 2022 due to increases in average balances and increases in average rates paid. The average interest rate paid on money market checking deposits was 0.25% and 0.17% for the quarter and six months ended June 30, 2022, compared to 0.12% and 0.14% for the quarter and six months ended June 30, 2021, respectively. Average money market checking deposit balances increased 5% for the second quarter of 2022 and increased 10% for the six months ended June 30, 2022.

Money market savings and passbooks. Interest expense on money market savings and passbooks deposits increased for the quarter and six months ended June 30, 2022 due to increases in average balances and increases in average rates paid. The average interest rate paid on money market savings and passbooks deposits was 0.25% and 0.20% for the quarter and six months ended June 30, 2022, compared to 0.17% and 0.18% for the quarter and six months ended June 30, 2021, respectively. Average money market savings and passbooks deposit balances increased 20% for the second quarter of 2022 and increased 25% for the six months ended June 30, 2022.

CDs. Interest expense on CDs decreased for the quarter and six months ended June 30, 2022 due to decreases in average rates paid and decreases in average balances. The average interest rate paid on CDs was 0.43% and 0.41% for the quarter and six months ended June 30, 2022, compared to 0.51% and 0.53% for the quarter and six months ended June 30, 2021, respectively. Average CD balances decreased 13% for the second quarter of 2022 and decreased 14% for the six months ended June 30, 2022.

Average total deposit balances increased 21% for the second quarter of 2022 and increased 25% for the six months ended June 30, 2022. The following table presents average deposit balances by deposit type as a percentage of average total deposits:

	Quarter Ended June 30,		Six Months Ended June 30,	
Average Deposits by Type as a % of Average Total Deposits	**2022**	**2021**	**2022**	**2021**
Checking	72 %	68 %	71 %	68 %
Money market checking	13 %	15 %	13 %	15 %
Money market savings and passbooks	11 %	11 %	11 %	11 %
CDs	4 %	6 %	5 %	6 %

At June 30, 2022, our total deposits were $165.6 billion, compared to $134.7 billion at June 30, 2021, an increase of 23%, and the weighted average contractual rate paid on total deposits was 0.21% and 0.07%, respectively. We will continue to focus on growth in our core deposit base to fund a significant percentage of our future asset growth. In addition to deposits, we may 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 decreased for the quarter and six months ended June 30, 2022 primarily due to decreases in average long-term FHLB advances and the average cost of long-term FHLB advances, partially offset by increases in average short-term FHLB advances.

Interest expense on short-term FHLB advances increased for the quarter and six months ended June 30, 2022 due to higher average balances, which increased 100% for both the quarter and six months ended June 30, 2022. The average cost of short-term FHLB advances was 1.20% for both the quarter and six months ended June 30, 2022.

Interest expense on long-term FHLB advances decreased due to decreases in average balances and decreases in the average cost of long-term FHLB advances. Average long-term FHLB advances decreased 59% for the second quarter of 2022 and decreased 64% for the six months ended June 30, 2022. Average long-term FHLB advances as a proportion of total average interest-bearing liabilities were 4% for both the quarter and six months ended June 30, 2022, compared to 11% and 12% for the quarter and six months ended June 30, 2021, respectively. The average cost of long-term FHLB advances was 1.09% and 1.39% for the second quarter of 2022 and 2021, respectively, and was 1.02% and 1.42% for the six months ended June 30, 2022 and 2021, respectively.

Provision (Reversal of Provision) for Credit Losses

The following table presents information related to the provision (reversal of provision) for credit losses:

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	% Change Quarter Ended June 30, 2022 vs. 2021	% Change Six Months Ended June 30, 2022 vs. 2021
Provision (reversal of provision) for credit losses:						
Debt securities held-to-maturity	$ 1	$ 1	$ 2	$ 2	31 %	(9)%
Loans	29	17	36	3	71 %	910 %
Unfunded loan commitments	1	(2)	3	(4)	NM	NM
Total	$ 31	$ 16	$ 41	$ 1	92 %	2,550 %

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

The provision for credit losses for the quarters and six months ended June 30, 2022 and 2021 was primarily driven by loan growth. In addition, the provision for the six months ended June 30, 2022 was partially reduced by improvements in individually assessed loans. For the quarter and six months ended June 30, 2021, the provision was partially reduced by improvements in economic conditions. The macroeconomic forecasts, historical loss rates, and historical prepayment (or repayment) speeds 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 millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021	% Change Quarter Ended June 30, 2022 vs. 2021	% Change Six Months Ended June 30, 2022 vs. 2021
Noninterest income:						
Investment management fees	$ 164	$ 136	$ 329	$ 255	20 %	29 %
Brokerage and investment fees	33	17	55	32	88 %	71 %
Insurance fees	3	3	7	6	22 %	20 %
Trust fees	7	6	14	12	13 %	18 %
Foreign exchange fee income	25	21	48	38	21 %	28 %
Deposit fees	8	7	14	13	17 %	7 %
Loan and related fees	10	9	19	16	6 %	11 %
Income from investments in life insurance	11	21	25	38	(48)%	(35)%
Other income, net	2	6	3	12	(62)%	(73)%
Total noninterest income	$ 263	$ 226	$ 514	$ 422	16 %	22 %

Noninterest income increased for the quarter and six months ended June 30, 2022 primarily due to higher wealth management fees due to growth in AUM, partially offset by decreases in income from investments in life insurance.

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. The increases in investment management fees for the quarter and six months ended June 30, 2022 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, which are impacted by market conditions. Generally, higher fees are earned for managing equity securities than for managing a fixed income portfolio. In addition, since our investment management fees are generally based on AUM levels as of the beginning of a quarterly period, the timing of fluctuation in AUM levels also impacts the level of fees. Changes in FRIM's AUM for the quarter and six months ended June 30, 2022 compared to the same periods a year ago are presented in the table below:

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
FRIM AUM:				
Beginning balance	$ 108,771	$ 90,819	$ 109,130	$ 83,596
Net client flow	2,307	2,974	7,222	7,511
Market appreciation (depreciation)	(10,874)	5,666	(16,148)	8,352
Ending balance	$ 100,204	$ 99,459	$ 100,204	$ 99,459

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 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. The increases in brokerage and investment fees for the quarter and six months ended June 30, 2022 were primarily due to higher fees from money market mutual funds as a result of rising interest rates, as well as increases in client activity. Changes in client assets in brokerage accounts through FRSC and in third-party money market mutual funds for the quarter and six months ended June 30, 2022 compared to the same periods a year ago are presented in the table below:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Brokerage AUA:				
Beginning balance	$ 128,129	$ 101,478	$ 128,258	$ 88,059
Net client flow	4,749	4,165	10,200	12,678
Market appreciation (depreciation)	(15,899)	6,716	(21,479)	11,622
Ending balance	$ 116,979	$ 112,359	$ 116,979	$ 112,359
Money market mutual funds AUA:				
Beginning balance	$ 18,543	$ 11,435	$ 23,673	$ 9,003
Net client flow	(8,033)	1,674	(13,163)	4,106
Ending balance	$ 10,510	$ 13,109	$ 10,510	$ 13,109

Brokerage and investment fees are based on the volume and type of transaction activity, conditions in the securities markets, level of money market mutual fund balances and rates, and our ability to attract new clients, and will vary in the future based on these factors.

Insurance fees. We earn revenue from selling life insurance and annuity policies to our clients through FRSC. Insurance fees consist of initial commissions when a policy is sold and subsequent commissions each year that a policy is renewed. 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. Changes in AUA for the quarter and six months ended June 30, 2022 compared to the same periods a year ago are presented in the table below:

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Trust AUA:				
Beginning balance	$ 14,344	$ 10,986	$ 13,695	$ 9,910
Net client flow	915	99	1,508	854
Market appreciation (depreciation)	(265)	411	(209)	732
Ending balance	$ 14,994	$ 11,496	$ 14,994	$ 11,496
Custody AUA:				
Beginning balance	$ 4,408	$ 4,216	$ 4,687	$ 3,889
Net client flow	91	(180)	306	(26)
Market appreciation (depreciation)	(400)	403	(894)	576
Ending balance	$ 4,099	$ 4,439	$ 4,099	$ 4,439

Trust fees are primarily based on the level and mix of AUA 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. The increases in foreign exchange fee income were 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

Loan and related fees. 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.

Income from investments in life insurance. Income from investments in life insurance decreased for the quarter and six months ended June 30, 2022 primarily due to decreases in cash surrender value of $12 million and $16 million, respectively, from market depreciation in certain life insurance investments related to the Bank's Deferred Compensation Plan. These decreases in income were offset by corresponding decreases in the deferred compensation expense included in salaries and employee benefits.

The total book value of the Bank's portfolio of these tax-exempt investments was $3.3 billion and $2.6 billion at June 30, 2022 and 2021, respectively. The increase in the portfolio was primarily due to additional purchases of investments in life insurance.

Other Income, net. Other income, net includes net loan servicing fees, gain (loss) on investment securities and other operating income. The following table presents the main components of net other income:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Other income, net:				
Loan servicing fees, net	$ 2	$ 2	$ 3	$ 3
Gain (loss) on investment securities	(2)	1	(5)	2
Other operating income	2	3	5	7
Total other income, net	$ 2	$ 6	$ 3	$ 12

Noninterest Expense

The following table presents noninterest expense:

	Quarter Ended June 30,		Six Months Ended June 30,		% Change Quarter Ended June 30,	% Change Six Months Ended June 30,
($ in millions)	**2022**	**2021**	**2022**	**2021**	**2022 vs. 2021**	**2022 vs. 2021**
Noninterest expense:						
Salaries and employee benefits	$ 567	$ 482	$ 1,127	$ 945	18 %	19 %
Information systems	114	88	221	172	29 %	28 %
Occupancy	70	63	139	121	10 %	15 %
Professional fees	27	26	50	47	5 %	7 %
Advertising and marketing	16	16	29	29	(2)%	1 %
FDIC assessments	15	13	30	25	18 %	20 %
Other expenses	104	74	183	144	40 %	27 %
Total noninterest expense	$ 913	$ 762	$ 1,779	$ 1,483	20 %	20 %

The increases in noninterest expense for the quarter and six months ended June 30, 2022 were primarily attributed to continued investments in our business expansion, including hiring additional colleagues to support our growth and information systems initiatives, higher incentive compensation and higher travel and entertainment.

Noninterest expense was reduced by certain general and administrative costs that have been capitalized, which primarily were compensation costs directly related to loan originations. We capitalized loan origination costs of $105 million and $187 million for the quarter and six months ended June 30, 2022, compared to $79 million and $145 million for the quarter and six months ended June 30, 2021, respectively. 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 (within loans) 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 60.5% for the second quarter of 2022, compared to 62.0% for the second quarter of 2021, and was 61.2% for the six months ended June 30, 2022, compared to 62.7% for the six months ended June 30, 2021.

Salaries and employee benefits. Salaries and employee benefits is the largest component of noninterest expense and includes the cost of salaries, incentive compensation, deferred compensation, share-based 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. The increases in salaries and employee benefit expenses were attributed to the continued expansion of the franchise resulting in the addition of new personnel to support higher levels of lending, deposit growth and expansion of wealth management; and higher incentive compensation from the growth in checking deposits and wealth management fees. These increases were partially offset by decreases in deferred compensation expense. At June 30, 2022, we had 6,902 full-time equivalent employees, including temporary employees and independent contractors, a 14% increase from 6,065 at June 30, 2021.

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, costs associated with telecommunications for ATMs, office activities and internal networks, and depreciation and amortization expense associated with these costs. The increases in information systems expenses for the quarter and six months ended June 30, 2022 were primarily due to continued technology initiatives to upgrade our systems, enhance the client experience and support our growth.

Occupancy. Occupancy costs increased for the quarter and six months ended June 30, 2022 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. The increases for the quarter and six months ended June 30, 2022 were primarily due to increases in consulting services supporting various technology initiatives, partially offset by lower legal 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 vary based on the number of marketing initiatives, level of advertising costs and costs associated with holding client events to support our growth. The variances for the quarter and six months ended June 30, 2022 were primarily due to decreases in deposit-related promotions offset by increases in costs associated with holding client events to support our growth.

FDIC assessments. FDIC assessments increased for the six months ended June 30, 2022 primarily due to growth in the assessment base as a result of the growth in average total assets.

Other expenses. Other expenses include costs related to lending and deposit activities, client service, hiring, training, charitable contributions, insurance, prepayment penalties on FHLB advances, and other costs related to expanding operations. The increases in travel and entertainment, training and recruiting costs were the result of increased activity, including as a result of the lessening of COVID-19 related restrictions, compared to the same periods a year ago. Other operating expenses include employee wellness and event costs, business taxes, cash management, postage, and other miscellaneous expenses and fees. The following table presents the main components of other expenses:

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Other expenses:				
Deposit client related costs	$ 16	$ 10	$ 28	$ 21
Travel and entertainment	10	5	17	7
Loan related costs	8	8	17	13
Recruiting	9	4	14	8
Custody and clearing fees	7	5	13	7
Charitable contributions	11	2	12	10
Subscriptions	6	5	10	10
Training	6	4	10	7
Insurance	4	3	8	7
Prepayment penalties on FHLB advances	—	5	—	10
Other operating expenses	27	23	54	44
Total other expenses	$ 104	$ 74	$ 183	$ 144

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 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 six months were primarily the result of lower excess tax benefits upon vesting of stock awards.

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

	Quarter Ended June 30,		Six Months Ended June 30,	
Effective Tax Rate	**2022**	**2021**	**2022**	**2021**
Effective tax rate, prior to excess tax benefits—stock awards	24.0 %	21.7 %	23.7 %	22.1 %
Excess tax benefits—stock awards	(0.6)	(4.3)	(0.6)	(2.5)
Effective tax rate	23.4 %	17.4 %	23.1 %	19.6 %

The number of RSUs and PSUs vested impact the amount of excess tax benefits recorded as a reduction in provision for income taxes. See Note 14 in "Item 1. Financial Statements" for additional information regarding excess tax benefits recognized for stock awards. See Note 16 in "Item 1. Financial Statements" for additional information regarding income taxes.

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 from investments in life insurance. 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 life insurance policies and annuity contracts through FRSC; (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 19 in "Item 1. Financial Statements."

Commercial Banking

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

	Quarter Ended June 30,		Six Months Ended June 30,		% Change Quarter Ended June 30,	% Change Six Months Ended June 30,
($ in millions)	**2022**	**2021**	**2022**	**2021**	**2022 vs. 2021**	**2022 vs. 2021**
Net interest income	$ 1,156	$ 957	$ 2,213	$ 1,855	21 %	19 %
Provision for credit losses	31	16	41	1	92 %	2,550 %
Noninterest income	29	41	57	75	(29)%	(24)%
Noninterest expense	698	604	1,346	1,167	15 %	15 %
Income before provision for income taxes	456	378	883	762	20 %	16 %
Provision for income taxes	100	58	192	139	70 %	37 %
Net income	$ 356	$ 320	$ 691	$ 623	11 %	11 %

Net interest income for Commercial Banking increased for the quarter and six months ended June 30, 2022 primarily due to growth in average interest-earning assets and increases in net interest margin.

The provision for credit losses for the quarters and six months ended June 30, 2022 and 2021 was primarily driven by loan growth. In addition, the provision for the six months ended June 30, 2022 was partially reduced by improvements in individually assessed loans. For the quarter and six months ended June 30, 2021, the provision was partially reduced by improvements in economic conditions. The macroeconomic forecasts, historical loss rates, and historical prepayment (or repayment) speeds 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 decreased for the quarter and six months ended June 30, 2022 primarily driven by lower income from investments in life insurance due to decreases in cash surrender value from market depreciation in certain life insurance investments.

Noninterest expense for Commercial Banking increased for the quarter and six months ended June 30, 2022 primarily due to continued investments in our business expansion, including hiring additional colleagues to support our growth and information systems initiatives, higher incentive compensation and higher travel and entertainment.

Provision for income taxes for Commercial Banking increased for the quarter and six months ended June 30, 2022 primarily due to higher pre-tax income.

Wealth Management

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

	Quarter Ended June 30,		Six Months Ended June 30,		% Change Quarter Ended June 30,	% Change Six Months Ended June 30,
($ in millions)	**2022**	**2021**	**2022**	**2021**	**2022 vs. 2021**	**2022 vs. 2021**
Net interest income	$ 90	$ 46	$ 178	$ 87	96 %	104 %
Noninterest income	238	197	465	369	21 %	26 %
Noninterest expense	219	170	441	338	29 %	30 %
Income before provision for income taxes	109	73	202	118	50 %	72 %
Provision for income taxes	32	20	59	33	63 %	81 %
Net income	$ 77	$ 53	$ 143	$ 85	45 %	68 %

Net interest income for Wealth Management 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 amounts, allocated credit rates, and type of Wealth Management client deposits. Net interest income increased primarily as a result of growth in Wealth Management client deposits, including sweep deposit accounts, as well as a result of credit rate changes.

Wealth Management client deposits totaled $21.8 billion and $17.6 billion at June 30, 2022 and 2021, respectively, including sweep deposits. Wealth Management client deposits, including sweep accounts, averaged $20.7 billion and $17.9 billion for the second quarter of 2022 and 2021, respectively, and averaged $20.9 billion and $17.7 billion for the six months ended June 30, 2022 and 2021, 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 1.75% for the second quarter of 2022, compared to 1.03% for the second quarter of 2021, and 1.73% for the six months ended June 30, 2022, compared to 1.00% for the six months ended June 30, 2021.

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 2.80% and 2.68% for the second quarter of 2022 and 2021, respectively, and 2.74% and 2.67% for the six months ended June 30, 2022 and 2021, 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 $145 million and $120 million for the second quarter of 2022 and 2021, respectively, and $284 million and $234 million for the six months ended June 30, 2022 and 2021, respectively.

Noninterest income for Wealth Management increased for the quarter and six months ended June 30, 2022 primarily due to increases in investment management fees due to growth in AUM, 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, which are impacted by market conditions. In addition, since our investment management fees are generally based on AUM levels as of the beginning of a quarterly period, the timing of fluctuation in AUM levels also impacts the level of fees. The future level of investment management fees depends on the level and mix of AUM, type of services and investments chosen, market conditions and our ability to attract new clients. Brokerage and investment 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 increased for the quarter and six months ended June 30, 2022 primarily due to higher salaries and employee 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 increased for the quarter and six months ended June 30, 2022 primarily due to higher pre-tax income.

AUM and AUA, in aggregate, increased slightly compared to June 30, 2021 due to net client inflow, partially offset by market decline. 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 client assets served by different areas with multiple revenue streams, 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)	June 30, 2022	March 31, 2022	December 31, 2021	September 30, 2021	June 30, 2021
First Republic Investment Management	$ 100,204	$ 108,771	$ 109,130	$ 101,105	$ 99,459
Brokerage and investment:					
Brokerage	116,979	128,129	128,258	115,793	112,359
Money market mutual funds	10,510	18,543	23,673	18,074	13,109
Total brokerage and investment	127,489	146,672	151,931	133,867	125,468
Trust Company:					
Trust	14,994	14,344	13,695	12,220	11,496
Custody	4,099	4,408	4,687	4,533	4,439
Total Trust Company	19,093	18,752	18,382	16,753	15,935
Total AUM and AUA	$ 246,786	$ 274,195	$ 279,443	$ 251,725	$ 240,862

The following table presents changes in AUM and AUA for our Wealth Management segment. Net client flow includes adding to the balance in existing accounts by the depositing of additional funds and the opening of new accounts, offset by the closing of accounts or the withdrawing of funds. The portion of the net change that cannot be attributed to the deposit or withdrawal of funds is reported in market appreciation (depreciation). For additional discussion of the changes in AUM and AUA for First Republic Investment Management, brokerage and investment, and the Trust Company for the quarter and six months ended June 30, 2022 compared to the same periods a year ago, refer to "—Results of Operations—Quarter and Six Months Ended June 30, 2022, Compared to Quarter and Six Months Ended June 30, 2021—Noninterest Income—Wealth Management Fees."

	Quarter Ended June 30,		Six Months Ended June 30,	
($ in millions)	2022	2021	2022	2021
Beginning balance	$ 274,195	$ 218,934	$ 279,443	$ 194,457
Net client flow	29	8,732	6,072	25,123
Market appreciation (depreciation)	(27,438)	13,196	(38,729)	21,282
Ending balance	$ 246,786	$ 240,862	$ 246,786	$ 240,862

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

	% of AUM				
Investment Type	June 30, 2022	March 31, 2022	December 31, 2021	September 30, 2021	June 30, 2021
Equities	55 %	60 %	61 %	59 %	59 %
Fixed income	27	25	25	27	27
Alternative investments	10	9	9	9	9
Cash and cash equivalents	8	6	5	5	5
Total	100 %	100 %	100 %	100 %	100 %

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

Fee Income as a Percentage of Average AUM and AUA	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
First Republic Investment Management	0.63 %	0.57 %	0.62 %	0.56 %
Brokerage and investment:				
Brokerage	0.07 %	0.07 %	0.07 %	0.06 %
Money market mutual funds	0.32 %	0.01 %	0.16 %	0.01 %
Total brokerage and investment	0.10 %	0.06 %	0.08 %	0.06 %
Trust Company:				
Trust	0.16 %	0.19 %	0.17 %	0.18 %
Custody	0.10 %	0.08 %	0.09 %	0.10 %
Total Trust Company	0.15 %	0.16 %	0.15 %	0.16 %
Total	0.31 %	0.28 %	0.30 %	0.27 %

Balance Sheet Analysis

Investments

The following table presents the investment portfolio:

($ in millions)	June 30, 2022	December 31, 2021
Debt securities available-for-sale:		
Agency residential MBS	$ 2,071	$ 1,829
Other residential MBS	12	15
Agency commercial MBS	1,308	1,490
Securities of U.S. states and political subdivisions—taxable	47	47
Total	$ 3,438	$ 3,381
Debt securities held-to-maturity:		
U.S. Government-sponsored agency securities	$ 165	$ 100
Agency residential MBS	1,794	1,380
Other residential MBS	8	9
Agency commercial MBS	5,399	2,719
Securities of U.S. states and political subdivisions:		
Tax-exempt municipal securities	17,145	15,011
Tax-exempt nonprofit debentures	71	72
Taxable municipal securities	1,726	1,632
Corporate debt securities	1,413	1,378
Total	27,721	22,301
Less: Allowance for credit losses	(11)	(9)
Debt securities held-to-maturity, net	$ 27,710	$ 22,292
Equity securities (fair value):		
Mutual funds and marketable equity securities	$ 23	$ 28

The total combined investment securities portfolio (consisting of available-for-sale, held-to-maturity and equity securities, excluding any ACL) represented 16% and 14% of total assets at June 30, 2022 and December 31, 2021, respectively.

The weighted average duration of the available-for-sale portfolio was 4.4 and 3.9 years at June 30, 2022 and December 31, 2021, respectively. The weighted average duration of the held-to-maturity portfolio was 10.9 and 10.6 years at June 30, 2022 and December 31, 2021, respectively.

At June 30, 2022, 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 $38 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

As of June 30, 2022, no ACL was recognized on available-for-sale debt securities.

As of June 30, 2022, the ACL on held-to-maturity debt securities totaled $11 million and consisted primarily of the ACL on securities of U.S. states and political subdivisions (including tax-exempt municipal securities and taxable municipal securities). The ACL on these securities is determined by expert judgment, which is based on historical ratings-based average probabilities of default and industry average LGD 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.

Loan Portfolio

The following table presents the Bank's loan portfolio and ACL:

($ in millions)	June 30, 2022	December 31, 2021
Residential real estate		
Single family	$ 89,295	$ 76,793
Home equity lines of credit	2,699	2,584
Single family construction	1,117	993
Total residential real estate	93,111	80,370
Income property		
Multifamily	18,346	15,966
Commercial real estate	9,182	8,531
Multifamily/commercial construction	2,019	1,927
Total income property	29,547	26,424
Business		
Capital call lines of credit	10,727	10,999
Tax-exempt	3,605	3,680
Other business	4,638	3,961
PPP	82	545
Total business	19,052	19,185
Other		
Stock secured	4,041	3,435
Other secured	2,774	2,457
Unsecured	2,994	3,085
Total other	9,809	8,977
Total loans held for investment	151,519	134,956
Less: Allowance for credit losses	(729)	(694)
Loans, net	$ 150,790	$ 134,262

The following table presents an analysis of our loan portfolio at June 30, 2022, 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	$ 32,304	$16,876	$18,271	$ 8,233	$2,911	$ 870	$ 9,830	$ 89,295	59 %
Home equity lines of credit	1,059	375	602	285	73	12	293	2,699	2
Single family construction	244	256	316	42	43	12	204	1,117	1
Total residential real estate	33,607	17,507	19,189	8,560	3,027	894	10,327	93,111	62
Income property									
Multifamily	6,595	2,818	4,662	861	1,843	352	1,215	18,346	12
Commercial real estate	3,497	1,600	2,209	315	319	366	876	9,182	6
Multifamily/commercial construction	358	146	1,035	63	87	4	326	2,019	1
Total income property	10,450	4,564	7,906	1,239	2,249	722	2,417	29,547	19
Business									
Capital call lines of credit	3,675	3,343	908	841	71	2	1,887	10,727	7
Tax-exempt	996	674	925	390	272	2	346	3,605	2
Other business	1,628	845	720	285	224	30	906	4,638	3
PPP	47	9	18	1	4	—	3	82	—
Total business	6,346	4,871	2,571	1,517	571	34	3,142	19,052	12
Other									
Stock secured	787	543	686	288	131	103	1,503	4,041	3
Other secured	473	1,029	107	375	8	—	782	2,774	2
Unsecured	871	627	559	253	108	42	534	2,994	2
Total other	2,131	2,199	1,352	916	247	145	2,819	9,809	7
Total	$ 52,534	$29,141	$31,018	$12,232	$6,094	$ 1,795	$18,705	$151,519	100 %
% by location at June 30, 2022	35 %	19 %	20 %	8 %	4 %	1 %	13 %	100 %	
% by location at December 31, 2021	36 %	20 %	20 %	8 %	4 %	1 %	11 %	100 %	

At June 30, 2022 and December 31, 2021, 52% and 51%, respectively, of total loans were secured by real estate properties located in California. Future economic or political conditions, natural disasters (including the increasing prevalence or intensity of natural disasters as a result of the effects of climate change), 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 Repl Index, 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 June 30, 2022, by rate type:

	Adjustable Rate							
($ in millions)	Prime	LIBOR	COFI Repl Index[(1)]	Other	Total	Hybrid Rate	Fixed Rate	Total
Residential real estate								
Single family	$ 352	$ 2,617	$ 1,813	$ 165	$ 4,947	$ 55,874	$ 28,474	$ 89,295
Home equity lines of credit	2,698	—	—	—	2,698	1	—	2,699
Single family construction	21	—	—	—	21	4	1,092	1,117
Total residential real estate	3,071	2,617	1,813	165	7,666	55,879	29,566	93,111
Income property								
Multifamily	231	504	1,116	125	1,976	8,147	8,223	18,346
Commercial real estate	300	512	239	50	1,101	2,323	5,758	9,182
Multifamily/commercial construction	846	—	—	23	869	12	1,138	2,019
Total income property	1,377	1,016	1,355	198	3,946	10,482	15,119	29,547
Business								
Capital call lines of credit	9,899	532	—	14	10,445	269	13	10,727
Tax-exempt	106	162	—	—	268	424	2,913	3,605
Other business	2,042	180	9	14	2,245	273	2,120	4,638
PPP	—	—	—	—	—	—	82	82
Total business	12,047	874	9	28	12,958	966	5,128	19,052
Other								
Stock secured	1,529	382	—	2,030	3,941	18	82	4,041
Other secured	1,236	953	—	418	2,607	2	165	2,774
Unsecured	667	—	—	5	672	—	2,322	2,994
Total other	3,432	1,335	—	2,453	7,220	20	2,569	9,809
Total	$ 19,927	$ 5,842	$ 3,177	$ 2,844	$ 31,790	$ 67,347	$ 52,382	$ 151,519
% by rate type at June 30, 2022	13 %	4 %	2 %	2 %	21 %	44 %	35 %	100 %
% by rate type at December 31, 2021	14 %	5 %	3 %	2 %	24 %	44 %	32 %	100 %

(1) As a result of the discontinuation of COFI, the Bank transitioned loans formerly indexed to COFI to the COFI Repl Index in February 2022.

At June 30, 2022, included in the hybrid-rate and fixed-rate loan portfolios are $3.8 billion, or 2% of the total loan portfolio, that either (1) mature within one year or (2) are within one year of adjusting from the initial fixed-rate period.

Many of our loan products determine the amount of interest by reference to certain benchmark rates or indices. The FHLB of San Francisco ceased calculating and publishing COFI on January 31, 2022. Additionally, in March 2021, the FCA announced the dates that panel bank submissions for all LIBOR settings will cease, after which the respective LIBOR settings will no longer be provided by any administrator, including the cessation of the one-week and two-month USD LIBOR tenors after December 31, 2021 and all other USD LIBOR tenors after June 30, 2023. In March 2022, President Biden signed the LIBOR Act into law. The LIBOR Act provides a statutory framework to replace USD LIBOR with a benchmark rate based on SOFR for contracts governed by U.S. law that have no fallbacks or fallbacks that would require the use of a poll or LIBOR-based rate. The Bank ceased offering new loans indexed to COFI in the first half of 2018 and to LIBOR in the first half of 2019. In lieu of COFI or LIBOR, new loan originations are currently indexed to Prime or a 12-month average of 1-year CMT. As the replacement index for COFI, the Bank selected COFI Repl Index, which is based on Federal COFI plus/minus a spread adjustment equal to the five-year historical median spread between COFI and Federal COFI. In February 2022, the Bank transitioned outstanding loans indexed to COFI to this new index. The Bank is continuing the assessment of its outstanding loans indexed to LIBOR.

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. The following table presents our single family loan portfolio that fully and evenly amortizes until maturity following an initial interest-only period of generally ten years:

	June 30, 2022		December 31, 2021	
($ in millions)	**Unpaid Principal Balance**	**% of Total Single Family**	**Unpaid Principal Balance**	**% of Total Single Family**
Interest-only single family	$ 53,223	60 %	$ 46,620	61 %

At June 30, 2022, interest-only home loans had a weighted average LTV of 56%, based on appraised value at the time of origination, and had credit scores averaging 764 at origination. At June 30, 2022, 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.

The following table presents LTV information at origination for all single family loans:

	June 30, 2022	
($ in millions)	**Unpaid Principal Balance**	**% of Total**
LTV at Origination		
Less than or equal to 60%	$ 46,262	52.1 %
Greater than 60% to 70%	27,123	30.5
Greater than 70% to 80%	15,061	16.9
Greater than 80%	437	0.5
Total	$ 88,883	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 770, 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 June 30, 2022, 39% of HELOCs are in first lien position, and 50% of HELOCs are in second lien position behind a first residential mortgage originated by us, including loans subsequently sold to investors, based on total commitment.

The following table presents CLTV information at origination for HELOCs:

	June 30, 2022		
($ in millions)	**Unpaid Principal Balance**	**Total Commitment**	**% of Unpaid Principal Balance**
CLTV at Origination			
Less than or equal to 60%	$ 1,860	$ 7,314	70.1 %
Greater than 60% to 70%	578	1,844	21.8
Greater than 70% to 80%	202	458	7.6
Greater than 80%	13	15	0.5
Total	$ 2,653	$ 9,631	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. These loans are typically disbursed as construction progresses and can be converted into a permanent mortgage loan once the property is occupied. At June 30, 2022 and December 31, 2021, the unpaid principal balance of single family construction loans was $1.1 billion and $996 million, respectively, and the total commitment was $2.5 billion and $2.0 billion, 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), 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 millions)	**June 30, 2022**	**December 31, 2021**
Multifamily	$ 18,354	$ 15,960
Multifamily—interest-only [1]	$ 9,208	$ 7,518

[1] Excludes lines of credit.

At June 30, 2022, interest-only multifamily loans (excluding lines of credit) had a weighted average LTV of 51% 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:

	June 30, 2022			December 31, 2021		
($ in millions)	Unpaid Principal Balance	Total Commitment	% of Total Multifamily	Unpaid Principal Balance	Total Commitment	% of Total Multifamily
Multifamily lines of credit—interest-only	$ 746	$ 1,229	4.1 %	$ 432	$ 827	2.7 %

At June 30, 2022, interest-only multifamily lines of credit had a weighted average LTV of 54% 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 millions)	June 30, 2022	December 31, 2021
Commercial real estate	$ 9,192	$ 8,537
Commercial real estate—interest-only [(1)]	$ 3,352	$ 2,886

(1) Excludes lines of credit.

At June 30, 2022, 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:

	June 30, 2022			December 31, 2021		
($ in millions)	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	$ 366	$ 927	4.0 %	$ 442	$ 939	5.2 %

At June 30, 2022, interest-only commercial real estate lines of credit had a weighted average LTV of 45% based on the appraised value at the time of origination.

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 June 30, 2022 and December 31, 2021, the unpaid principal balance of multifamily/commercial construction loans was $2.0 billion and $1.9 billion, respectively, and the total commitment was $3.8 billion and $3.4 billion, respectively.

Business

Business loans include capital call lines of credit, tax-exempt, other business and 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 and museums. 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 our business loan portfolio by type:

	June 30, 2022			December 31, 2021		
($ in millions)	**Amortized Cost**	**Total Commitment**	**% of Amortized Cost**	**Amortized Cost**	**Total Commitment**	**% of Amortized Cost**
Private Equity/Venture Capital Funds	$ 11,099	$ 28,693	58 %	$ 11,657	$ 27,244	61 %
Schools/Non-Profit Organizations	4,056	5,188	22	4,053	5,244	21
Investment Firms	816	1,566	4	425	1,229	2
Real Estate Related Entities	953	1,320	5	792	1,130	4
Professional Service Firms	407	737	2	369	689	2
Aviation/Marine	538	559	3	454	475	2
Vineyards/Wine	152	238	1	143	235	1
Clubs and Membership Organizations	123	166	1	114	160	1
Entertainment Industry	24	76	—	35	87	0
Other	802	1,240	4	598	1,053	3
Total excluding PPP	18,970	39,783	100	18,640	37,546	97
PPP [(1)]	82	84	—	545	555	3
Total including PPP	$ 19,052	$ 39,867	100 %	$ 19,185	$ 38,101	100 %

[(1)] Total commitment related to PPP excludes net deferred fees unamortized balance of $1 million and $10 million as of June 30, 2022 and December 31, 2021, respectively.

The following table presents our business lines of credit by type:

	Lines of Credit					
	June 30, 2022			December 31, 2021		
($ in millions)	Unpaid Principal Balance	Total Commitment	Utilization Percentage	Unpaid Principal Balance	Total Commitment	Utilization Percentage
Private Equity/Venture Capital Funds	$ 10,896	$ 28,484	38.3 %	$ 11,620	$ 27,200	42.7 %
Schools/Non-Profit Organizations	583	1,714	34.0 %	631	1,820	34.7 %
Investment Firms	555	1,305	42.5 %	266	1,070	24.9 %
Real Estate Related Entities	259	625	41.4 %	276	613	45.0 %
Professional Service Firms	249	579	43.0 %	238	559	42.6 %
Vineyards/Wine	60	145	41.4 %	45	137	32.8 %
Clubs and Membership Organizations	36	78	46.2 %	30	75	40.0 %
Entertainment Industry	5	57	8.8 %	15	67	22.4 %
Aviation/Marine	20	40	50.0 %	23	43	53.5 %
Other	326	796	41.0 %	296	749	39.5 %
Total	$ 12,989	$ 33,823	38.4 %	$ 13,440	$ 32,333	41.6 %

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 June 30, 2022, the unpaid principal balance and total commitment for capital call lines of credit was $10.7 billion and $27.8 billion, respectively, resulting in an utilization rate for these lines of credit of 38.5% at June 30, 2022.

The following table presents our business term loans by type:

	Term Loans	
	Unpaid Principal Balance	
($ in millions)	June 30, 2022	December 31, 2021
Schools/Non-profit Organizations	$ 3,474	$ 3,424
Real Estate Related Entities	695	517
Aviation/Marine	519	432
Investment Firms	261	159
Private Equity/Venture Capital Funds	209	44
Professional Service Firms	158	130
Vineyards/Wine	93	98
Clubs and Membership Organizations	88	85
Entertainment Industry	19	20
Other	444	304
Total excluding PPP	5,960	5,213
PPP	84	555
Total including PPP	$ 6,044	$ 5,768

PPP Loans

In 2020 and 2021, the Bank was a lender under the PPP, which was initially established in 2020 under the CARES Act and subsequently amended by the Flexibility Act, Economic Aid Act, American Rescue Plan Act and PPP Extension Act. We originated PPP loans from April 2020 to June 2021, until the program ceased new loan originations. Under the PPP, loans are provided to small businesses impacted by COVID-19 for payroll costs and certain operating expenses. For all borrowers, the loans have a 1% interest rate and include a deferral period of principal and interest payments. The loans have a minimum tenor of 2 to 5 years. 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 following table presents information related to PPP loans:

($ in millions)	June 30, 2022
Loans outstanding [1]	$ 83
Forgiveness amounts approved by the SBA [2]	$ 2,777
Loans outstanding submitted for forgiveness review to the SBA [3]	$ 17

[1] Represents unpaid principal balance.
[2] Since the inception of the PPP through June 30, 2022, 14,746 PPP loans have received forgiveness.
[3] As of June 30, 2022, 29 PPP loans were in the forgiveness review process.

Other

Other loans include stock secured, other secured and unsecured loans. The following table presents the unpaid principal balance and total commitment for these loans:

	June 30, 2022		December 31, 2021	
($ in millions)	Unpaid Principal Balance	Total Commitment	Unpaid Principal Balance	Total Commitment
Stock secured	$ 4,035	$ 11,015	$ 3,430	$ 9,273
Other secured	2,773	6,106	2,456	5,053
Unsecured	2,988	4,354	3,080	4,347
Total	$ 9,796	$ 21,475	$ 8,966	$ 18,673

Stock Secured

Stock secured loans consist of loans that allow clients to borrow money against eligible marketable securities for a wide range of purposes, including, but not limited to: home renovations, business opportunities and general liquidity.

Other Secured

Other secured loans primarily consist of professional loan program loans, including term loans and lines of credit, which offer individuals an ability to borrow for capital and partnership requirements. Such loans had an unpaid principal balance of $2.6 billion and $2.3 billion at June 30, 2022 and December 31, 2021, respectively, and total commitments of $5.8 billion and $4.8 billion, respectively.

Unsecured

Unsecured loans primarily consist of household debt refinance loans, including term loans and personal lines of credit, which are made to refinance existing household debt and access additional financing at fixed interest rates. Such loans had an unpaid principal balance of $2.1 billion at both June 30, 2022 and December 31, 2021, and total commitments of $2.6 billion and $2.5 billion at June 30, 2022 and December 31, 2021, respectively.

In addition, unsecured loans include other 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 and are subject to annual or more frequent review.

Lines of Credit

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

Utilization Percentage	June 30, 2022	March 31, 2022	December 31, 2021	September 30, 2021	June 30, 2021
Home equity lines of credit	27.1 %	26.7 %	27.5 %	26.5 %	27.0 %
Single family construction	44.7 %	49.2 %	50.1 %	51.5 %	50.7 %
Multifamily	60.7 %	54.2 %	52.4 %	41.9 %	41.6 %
Commercial real estate	40.5 %	43.5 %	47.0 %	50.0 %	49.9 %
Multifamily/commercial construction	52.5 %	54.3 %	54.9 %	54.6 %	56.1 %
Capital call lines of credit	38.5 %	40.1 %	41.8 %	37.3 %	35.7 %
Tax-exempt	54.8 %	57.1 %	62.2 %	59.6 %	57.2 %
Other business	35.9 %	34.6 %	36.4 %	30.4 %	31.6 %
Stock secured	36.2 %	35.1 %	36.8 %	35.8 %	36.9 %
Other secured	41.7 %	43.9 %	44.8 %	43.4 %	42.5 %
Unsecured	47.6 %	46.8 %	47.0 %	47.2 %	45.2 %

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. 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. Some single family loans are originated for sale in the secondary market. From the inception of our predecessor institution in mid-1985 through June 30, 2022, we have originated $424.2 billion of loans, of which $36.1 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. The following table presents loan originations:

($ in millions)	Quarter Ended June 30, 2022	Quarter Ended June 30, 2021	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Residential real estate				
Single family	$ 10,638	$ 8,662	$ 19,014	$ 15,564
Home equity lines of credit	744	610	1,433	1,234
Single family construction	540	215	807	440
Total residential real estate	11,922	9,487	21,254	17,238
Income property				
Multifamily	2,330	1,102	4,039	1,893
Commercial real estate	816	458	1,382	772
Multifamily/commercial construction	492	272	876	583
Total income property	3,638	1,832	6,297	3,248
Business				
Capital call lines of credit	3,096	2,921	6,116	6,052
Tax-exempt	92	208	182	422
Other business	1,078	521	1,616	1,546
PPP	—	36	—	725
Total business	4,266	3,686	7,914	8,745
Other				
Stock secured	915	776	2,051	1,486
Other secured	815	598	1,481	1,037
Unsecured	413	372	782	718
Total other	2,143	1,746	4,314	3,241
Total loans originated	$ 21,969	$ 16,751	$ 39,779	$ 32,472

Total loan originations were $22.0 billion for the second quarter of 2022, compared to $16.8 billion for the second quarter of 2021, an increase of 31%, and were $39.8 billion for the six months ended June 30, 2022, compared to $32.5 billion for the six months ended June 30, 2021, an increase of 23%. Loan originations increased primarily due to increases in single family and multifamily lending. The volume and type of loan originations depend on the level of interest rates, the demand for loans in our markets and other economic conditions.

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.

	Quarter Ended				
LTVs for New Originations	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**
Single family	61 %	58 %	59 %	60 %	60 %
Home equity lines of credit [(1)]	50 %	50 %	52 %	50 %	50 %
Single family construction	56 %	55 %	55 %	55 %	56 %
Multifamily	53 %	54 %	51 %	51 %	51 %
Commercial real estate	48 %	51 %	48 %	41 %	45 %
Multifamily/commercial construction	55 %	54 %	52 %	55 %	55 %

[(1)] 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 borrower's 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	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**
Single family	771	769	768	769	769
Home equity lines of credit	772	765	774	772	772

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	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**
Purchase loans	52 %	42 %	45 %	47 %	51 %
Refinance loans	48	58	55	53	49
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:

Portfolio LTVs	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**
Single family (1)	58 %	58 %	58 %	58 %	57 %
Home equity lines of credit (2)	50 %	50 %	50 %	50 %	50 %
Single family construction	56 %	56 %	56 %	56 %	56 %
Multifamily	51 %	51 %	51 %	51 %	51 %
Commercial real estate	46 %	46 %	46 %	46 %	46 %
Multifamily/commercial construction	55 %	54 %	54 %	54 %	54 %

(1) Includes any loans held for sale, when applicable.
(2) 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. Our ARMs provide for a life cap 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 (i.e., 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.

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. Legislation and regulations that provide relief for borrowers affected by COVID-19 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 total nonaccrual loans, other real estate owned, the ratio of nonperforming assets to total assets, accruing loans 90 days or more past due and restructured accruing loans:

($ in millions)	June 30, 2022	December 31, 2021
Nonperforming assets:		
Nonaccrual loans	$ 137	$ 139
Other real estate owned	—	—
Total nonperforming assets	$ 137	$ 139
Nonperforming assets to total assets	0.07 %	0.08 %
Accruing loans 90 days or more past due	$ —	$ —
Restructured accruing loans	$ 12	$ 13

See Note 4 in "Item 1. Financial Statements" for information related to interest income on nonaccrual loans for the quarters and six months ended June 30, 2022 and 2021.

Of the loans on nonaccrual status, $58 million were current at June 30, 2022, compared to $52 million at December 31, 2021.

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

Allowance for Credit Losses on Loans

The Bank estimates its ACL on loans 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.

For a complete description of the accounting policies for determining the Bank's ACL on loans, see Note 4 in "Item 1. Financial Statements" in this Quarterly Report on Form 10-Q and Note 1 in Part II, "Item 8. Financial Statements and Supplementary Data" of our 2021 Form 10-K. In addition, see Note 4 in "Item 1. Financial Statements" for information related to changes in the ACL for loans. For further discussion of the Bank's ACL on loans, see "—Critical Accounting Policies and the Impact of Accounting Estimates—Allowance for Credit Losses on Loans."

The following table presents our net loan charge-offs, ACL on loans, average total loans, total loans and total nonaccrual loans, as well as ratios related to these measures:

	At or for the Quarter Ended June 30,		At or for the Six Months Ended June 30,	
($ in millions)	**2022**	**2021**	**2022**	**2021**
Net loan charge-offs	$ 1	$ 1	$ 1	$ 1
Allowance for credit losses on loans	$ 729	$ 637	$ 729	$ 637
Average total loans	$ 146,040	$ 120,702	$ 141,671	$ 117,691
Total loans	$ 151,519	$ 123,118	$ 151,519	$ 123,118
Total nonaccrual loans	$ 137	$ 133	$ 137	$ 133
Ratios:				
Net loan charge-offs to average total loans (annualized)	0.00 %	0.00 %	0.00 %	0.00 %
Nonaccrual loans to total loans	0.09 %	0.11 %	0.09 %	0.11 %
Allowance for credit losses on loans to:				
Total loans	0.48 %	0.52 %	0.48 %	0.52 %
Nonaccrual loans	531.2 %	479.3 %	531.2 %	479.3 %

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. For a complete description of the accounting policies for determining the Bank's ACL on unfunded loan commitments, see Note 4 in "Item 1. Financial Statements" in this Quarterly Report on Form 10-Q and Note 1 in Part II, "Item 8. Financial Statements and Supplementary Data" of our 2021 Form 10-K. In addition, see Note 4 in "Item 1. Financial Statements" for information related to changes in the ACL on unfunded loan commitments.

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.

See Note 5 in "Item 1. Financial Statements" for further information on loans originated and sold.

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 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 June 30, 2022, the Bank has an obligation to reimburse Freddie Mac for losses up to $30 million, or 12% of the multifamily loans securitized in 2018. As of June 30, 2022, the weighted average LTV of those loans was 53% based on the appraised value at the time of origination. There was no liability for estimated losses related to this reimbursement obligation at June 30, 2022, and the Bank has experienced no cumulative losses on the loans within this securitization through June 30, 2022. The remaining unpaid principal balance of multifamily loans securitized was $53 million at June 30, 2022, compared to $71 million at December 31, 2021 and $252 million at the time of securitization in 2018.

In connection with single family loans securitized in 2020, 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 securities was $9 million as of June 30, 2022, compared to $10 million as of December 31, 2021. There have been no cumulative losses on the loans within the securitization through June 30, 2022. The remaining unpaid principal balance of single family loans securitized was $173 million at June 30, 2022, compared to $195 million at December 31, 2021 and $300 million at the time of securitization in 2020.

Mortgage loans serviced for investors decreased to $3.9 billion at June 30, 2022, from $5.6 billion at June 30, 2021, due to repayments in the servicing portfolio exceeding loan sales over the past twelve months. The average servicing portfolio was $4.2 billion and $4.4 billion for the quarter and six months ended June 30, 2022, compared to $6.1 billion and $6.5 billion for the quarter and six months ended June 30, 2021, respectively, a decrease of 32% for the quarter and a decrease of 33% for the six months. The overall annualized repayment speed experienced on loans serviced was 31% and 30% for the quarter and six months ended June 30, 2022, compared to 37% and 38% for the quarter and six months ended June 30, 2021, respectively. MSRs are included in other assets on our consolidated balance sheets and are reported at the lower of amortized cost or fair value. At June 30, 2022, MSRs were $13 million (34 bps of loans serviced), compared to $21 million (37 bps of loans serviced) at June 30, 2021.

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 $10 million on single family loans sold. At June 30, 2022, single family loans serviced for investors that are 90 days or more past due were $6 million, or 14 bps of such loans serviced.

Deposit Gathering

We obtain funds from depositors by offering consumer and business checking, money market and passbook accounts, and term CDs. Our accounts are federally insured by the FDIC up to the maximum limit. At June 30, 2022, our total deposits were $165.6 billion, a 6% increase from $156.3 billion at December 31, 2021, as we continued to expand relationships with existing clients and acquire new deposit clients, both business and consumer. Estimated uninsured deposits totaled $119.8 billion and $116.7 billion as of June 30, 2022 and December 31, 2021, respectively. Estimates of uninsured deposits are based on the methodologies and assumptions used in our Consolidated Reports of Condition and Income ("Call Report") filings.

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 $161.3 billion and $151.5 billion at June 30, 2022 and December 31, 2021, respectively, and represented 97% of total deposits at both June 30, 2022 and December 31, 2021. Total deposits included $597 million of brokered deposits at June 30, 2022, compared to $851 million at December 31, 2021. The weighted average contractual rate paid on brokered deposits was 1.37% and 0.02% at June 30, 2022 and December 31, 2021, 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 millions)	June 30, 2022	December 31, 2021
Preferred Banking:		
Northern California	$ 46,598	$ 41,464
Metropolitan New York	26,706	26,059
Southern California	15,100	14,787
Boston	13,450	13,378
Other [1]	2,584	1,793
Subtotal	104,438	97,481
Preferred Banking Offices:		
Northern California	24,992	25,523
Metropolitan New York	7,630	7,556
Southern California	7,073	6,582
Boston	3,138	3,021
Florida [2]	2,311	2,231
Other [3]	1,260	1,271
Subtotal	46,404	46,184
Wealth management sweep	10,859	10,540
Other	3,946	2,116
Total deposits	$ 165,647	$ 156,321

(1) Consists of deposits domiciled in Portland, Oregon; Bellevue, Washington; and the Palm Beach, Florida region.
(2) Consists of deposits domiciled in the Palm Beach, Florida region.
(3) Consists of deposits domiciled in Portland, Oregon; Bellevue, Washington; and Jackson, Wyoming.

The following table presents business and consumer deposits:

($ in millions)	June 30, 2022	December 31, 2021
Business deposits:		
Checking	$ 83,968	$ 74,709
Money market checking	12,668	11,542
Money market savings	7,121	5,232
CDs	1,523	1,568
Subtotal	105,280	93,051
Percent of total deposits	64 %	60 %
Consumer deposits:		
Checking	34,660	37,379
Money market checking	8,567	8,762
Money market savings and passbooks	11,675	11,341
CDs	5,465	5,788
Subtotal	60,367	63,270
Percent of total deposits	36 %	40 %
Total deposits	$ 165,647	$ 156,321

At June 30, 2022, the weighted average contractual rate paid on CDs was 0.54%, and the weighted average remaining maturity of CDs was 6.3 months. The contractual maturities and weighted average contractual rate of our CDs were as follows:

($ in millions)	June 30, 2022 Amount	June 30, 2022 Rate
CDs maturing in:		
July 1 - December 31, 2022	$ 4,276	0.35 %
2023	2,385	0.75 %
2024	202	1.83 %
2025	76	1.70 %
2026	27	0.64 %
2027 and thereafter	21	0.62 %
Total	$ 6,987	0.54 %

We fund a portion of our assets with CDs that have balances greater than the FDIC insurance limit of $250,000. At June 30, 2022, our CDs having balances greater than the FDIC insurance limit by account totaled $2.6 billion, and the maturities of such CDs are presented in the following table:

($ in millions)	June 30, 2022
Remaining maturity:	
Three months or less	$ 1,133
Over three through six months	491
Over six through twelve months	773
Over twelve months	172
Total	$ 2,569

Borrowings

Our other sources of funding include both short-term and long-term borrowings. Short-term borrowings, which include federal funds purchased and short-term FHLB advances, have an original maturity of one year or less. Long-term debt, which includes long-term FHLB advances, senior notes and subordinated notes, has an original maturity in excess of one year. The level and mix of short-term and long-term borrowings vary based on funding needs and market conditions. The following table presents the carrying values and weighted average contractual rates of short-term borrowings and long-term debt:

	Carrying Value		Rate	
($ in millions)	June 30, 2022	December 31, 2021	June 30, 2022	December 31, 2021
Short-term borrowings:				
FHLB advances	$ 6,300	$ —	2.18 %	— %
Long-term debt:				
FHLB advances	$ 4,700	$ 3,700	1.25 %	0.95 %
Senior notes	499	998	1.91 %	2.21 %
Subordinated notes	779	779	4.50 %	4.50 %
Total long-term debt	$ 5,978	$ 5,477	1.74 %	1.69 %

The increases in short-term and long-term borrowings were driven primarily by new FHLB advances, which were utilized as additional sources of funding for the six months ended June 30, 2022. In addition, the 2.500% Senior Notes due 2022 with a principal balance of $500 million were redeemed in the second quarter of 2022, and, therefore, were no longer outstanding as of June 30, 2022.

As of June 30, 2022, the weighted average remaining maturity of long-term FHLB advances was 1.9 years.

See Note 9 in "Item 1. Financial Statements" for further discussion of borrowings.

At June 30, 2022, we had $55.7 billion of unused, available borrowing capacity at the FHLB supported by pledged loans. In addition, we had $4.2 billion of unused, available borrowing capacity at the Federal Reserve Bank discount window collateralized by pledged investment securities. This unused, available borrowing capacity at the FHLB and the Federal Reserve Bank discount window equaled 30% of total assets.

Liquidity and Capital Resources

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. Our traditional funding sources consist primarily of deposits, borrowings and equity. Other sources of liquidity consist of liquid assets such as cash and cash equivalents, as well as marketable, highly liquid securities and loans.

Liquidity Risk Management

We engage in various activities to manage our liquidity risk, including maintaining a diversified set of funding sources and holding sufficient liquid assets to meet our cash flow and funding needs. Liquidity and funding-related risk policies and limits are established within our Liquidity Risk Management Policy, which is approved by the Board at least annually. Liquidity risk is actively monitored and managed by the Treasury department, Chief Financial Officer and senior management through the Bank Enterprise Risk Management Committee, with independent oversight provided by the Board through the Directors' Enterprise Risk Management Committee. In addition, we maintain a contingency funding plan and perform scenario-based stress-testing to ensure resilience in case of expected and unexpected future events.

Sources of Liquidity

Refer to "—Balance Sheet Analysis—Deposit Gathering" and "—Balance Sheet Analysis—Borrowings" for further discussion of the composition of deposit and borrowing sources. In addition, we issue preferred stock and common stock as funding sources, which are also components of regulatory capital. Refer to "—Regulatory Capital Components and Ratios," as well as Notes 13 and 14 in "Item 1. Financial Statements" for additional discussion of the Bank's preferred and common stock.

As discussed in Part I, "Item 1A. Risk Factors—We are subject to liquidity risk, which could impair our ability to fund various obligations" in our 2021 Form 10-K, our access to funding sources in amounts adequate to finance our activities or on terms that are acceptable to us could be impaired by factors that affect us specifically or the financial services industry or economy generally. Management believes that the sources of available liquidity are well-diversified and adequate to meet all reasonably foreseeable short-term and long-term demands.

HQLA

At June 30, 2022, assets that are considered HQLA, including eligible cash, were $28.2 billion, or 15% of average total assets for the second quarter of 2022. HQLA include $11.6 billion of municipal securities.

Cash Requirements

Our short-term liquidity requirements primarily relate to operating expenses, financing of short-term assets, and payments relating to ongoing commitments and obligations due within one year. Our long-term liquidity requirements primarily relate to loan originations, investment purchases, the funding of long-term assets, and the meeting of ongoing commitments and obligations due in excess of one year. For additional discussion, see "—Commitments and Contractual Obligations."

Cash Flows

The following table presents the Bank's net cash provided by or used for operating, investing and financing activities, as well as cash balances for the periods indicated:

	At or for the Six Months Ended June 30,	
($ in millions)	**2022**	**2021**
Net cash provided by (used for) operating activities	$ 116	$ (316)
Net cash used for investing activities	$ (22,724)	$ (14,629)
Net cash provided by financing activities	$ 15,898	$ 17,727
Cash and cash equivalents at the end of period	$ 6,237	$ 7,877

Net cash used for investing activities consisted primarily of loan originations and purchases of investment securities. The increase in investing outflows for the six months ended June 30, 2022, compared to the six months ended June 30, 2021, was primarily attributable to growth in loan originations and the investment portfolio. Net cash provided by financing activities consisted primarily of growth in deposits, and for the six months ended June 30, 2022, additional short-term borrowings. Lower cash financing inflows for the six months ended June 30, 2022, compared to the six months ended June 30, 2021, was primarily the result of lower growth in deposits, offset by an increase in short-term FHLB advances. For additional information about the Bank's sources and uses of cash, refer to the Consolidated Statements of Cash Flows in "Item 1. Financial Statements."

Commitments and Contractual Obligations

In the ordinary course of business, we enter into transactions that involve financial instruments with off-balance sheet risks to meet the financing needs of our clients. These financial instruments include commitments to disburse additional funds on existing loans and lines of credit and commitments issued under standby letters of credit. Such instruments involve elements of credit risk and interest rate risk. Since these commitments may expire without being drawn, the total commitment amounts do not necessarily represent future cash requirements. See Note 12 in "Item 1. Financial Statements" for additional information regarding the Bank's lending commitments at June 30, 2022.

In addition to the commitments described above, the Bank enters into other contractual obligations in the ordinary course of business. Certain of these obligations, such as deposits, FHLB advances, senior notes, subordinated notes, unfunded commitments on tax credit investments and other investments, and lease liabilities are recorded as liabilities in the consolidated financial statements.

As discussed in Note 12 in "Item 1. Financial Statements," in connection with the securitization of loans with Freddie Mac, the Bank has an obligation to reimburse Freddie Mac for losses up to $30 million, or 12% of the multifamily loans securitized. At June 30, 2022, there was no liability for estimated losses related to this reimbursement obligation.

The following table presents information regarding our significant contractual obligations at June 30, 2022, and expected timing of payments for these obligations. Deposit obligations categorized as "indeterminate maturity" include all deposits other than CDs. Our deposit and borrowing obligations in the following table exclude contractual interest.

	Contractual Payments by Period			
($ in millions)	**Less Than 1 Year**	**Thereafter**	**Indeterminate Maturity**	**Total**
Deposits	$ 6,286	$ 701	$ 158,660	$ 165,647
FHLB advances	$ 7,200	$ 3,800	$ —	$ 11,000
Senior notes	$ —	$ 500	$ —	$ 500
Subordinated notes	$ —	$ 800	$ —	$ 800
Unfunded commitments—tax credit and other investments	$ 244	$ 437	$ —	$ 681
Lease liabilities	$ 180	$ 1,636	$ —	$ 1,816

See Notes 7 and 9 in "Item 1. Financial Statements" for additional information regarding leases and borrowings presented in the table above.

Regulatory Capital Components and Ratios

The following table presents the Bank's components of regulatory capital, average assets, and RWAs, as defined by regulatory capital rules:

($ in millions)	June 30, 2022	December 31, 2021
Regulatory Capital Components		
Shareholders' equity	$ 16,426	$ 15,898
CECL Capital Rule retained earnings adjustments [1]	43	58
CET1 capital adjustments and deductions:		
Preferred stock	(3,633)	(3,633)
Goodwill and other intangible assets, net of DTLs	(189)	(194)
DTAs that arise from tax credit carryforwards, net of DTLs	(83)	(115)
Accumulated other comprehensive loss	227	31
CET1 capital	12,791	12,045
Preferred stock	3,633	3,633
Additional Tier 1 capital	3,633	3,633
Tier 1 capital	16,424	15,678
Tier 2 capital instruments—subordinated notes [2]	779	779
Qualifying ACL [3]	766	727
CECL Capital Rule ACL adjustments [1]	(45)	(60)
Tier 2 capital	1,500	1,446
Total risk-based capital	$ 17,924	$ 17,124
Assets		
Average assets	$ 191,159	$ 178,911
CECL Capital Rule average assets adjustments [1]	43	58
Average assets after adjustments	$ 191,202	$ 178,969
RWAs	$ 139,815	$ 124,825
CECL Capital Rule DTAs adjustments [1]	(4)	(5)
RWAs after adjustments	$ 139,811	$ 124,820

[1] Beginning in 2020, amounts reflect the Bank's election to delay the estimated impact of the CECL ACL methodology on its regulatory capital, average assets and RWAs over a five-year transition period ending December 31, 2024.
[2] Subordinated notes mature in 2046 and 2047.
[3] Includes the ACL on loans, held-to-maturity debt securities and unfunded loan commitments.

At June 30, 2022 and December 31, 2021, the Bank's noncumulative perpetual preferred stock was 22% and 23% of Tier 1 capital, respectively.

We may, from time to time, issue additional common stock, preferred stock, or other forms of capital or debt instruments depending on market conditions and subject to any required regulatory approvals. Refer to Note 20 in "Item 1. Financial Statements" for information regarding the Bank's underwritten public offering of 2,587,500 new shares of common stock in August 2022, which added $402 million to common equity.

A "capital conservation buffer" of 2.5% of RWAs 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 for the four calendar quarters preceding the current calendar quarter).

Our capital ratios exceeded all applicable regulatory requirements at June 30, 2022 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 [1]	**June 30, 2022**	**December 31, 2021**	**Well-Capitalized Ratio**	**Minimum Capital Ratio**	**Minimum Capital Conservation Buffer** [2]
Tier 1 leverage ratio (Tier 1 capital to average assets)	8.59 %	8.76 %	5.00 %	4.00 %	— %
CET1 capital to RWAs	9.15 %	9.65 %	6.50 %	4.50 %	2.50 %
Tier 1 capital to RWAs	11.75 %	12.56 %	8.00 %	6.00 %	2.50 %
Total capital to RWAs	12.82 %	13.72 %	10.00 %	8.00 %	2.50 %

[1] Beginning in 2020, ratios reflect the Bank's election to delay the estimated impact of the CECL ACL methodology over a five-year transition period ending December 31, 2024.
[2] As of June 30, 2022, our capital conservation buffer was 4.65%, which exceeded the minimum requirement of 2.5% required to be held by banking institutions.

Return on Average Common Shareholders' Equity and Return on Average Tangible Common Shareholders' Equity

The following table presents the components of return on average common shareholders' equity and return on average tangible common shareholders' equity:

Return on Average Common Shareholders' Equity and Return on Average Tangible Common Shareholders' Equity [1], [2]	**Quarter Ended June 30, 2022**	**Quarter Ended June 30, 2021**	**Six Months Ended June 30, 2022**	**Six Months Ended June 30, 2021**
($ in millions)				
Average common shareholders' equity (a)	$12,662	$10,978	$12,527	$10,707
Less: Average goodwill and other intangible assets	(220)	(225)	(221)	(226)
Average tangible common shareholders' equity (b)	$12,442	$10,753	$12,306	$10,481
Net income available to common shareholders (c)	$ 392	$ 350	$ 756	$ 666
Return on average common shareholders' equity (c) / (a)	12.43 %	12.77 %	12.17 %	12.54 %
Return on average tangible common shareholders' equity (c) / (b)	12.65 %	13.04 %	12.39 %	12.81 %

[1] Return on average tangible common shareholders' equity is considered a non-GAAP financial measure, and is reconciled to GAAP return on average common shareholders' equity in this table.
[2] Ratios are annualized.

Book Value per Common Share and Tangible Book Value per Common Share

The following table presents the components of book value per common share and tangible book value per common share:

Book Value per Common Share and Tangible Book Value per Common Share [(1)]	June 30, 2022	December 31, 2021	June 30, 2021
(in millions, except per share amounts)			
Total shareholders' equity	$ 16,426	$ 15,898	$ 13,275
Less: Preferred stock	(3,633)	(3,633)	(2,143)
Total common shareholders' equity (a)	12,793	12,265	11,132
Less: Goodwill and other intangible assets	(220)	(222)	(224)
Total tangible common shareholders' equity (b)	$ 12,573	$ 12,043	$ 10,908
Number of shares of common stock outstanding (c)	180	179	177
Book value per common share (a) / (c)	$ 71.03	$ 68.34	$ 62.99
Tangible book value per common share (b) / (c)	$ 69.81	$ 67.10	$ 61.72

(1) Tangible book value per common share is considered a non-GAAP financial measure, and is reconciled to GAAP book value per common share in this table.

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 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. Compliance with these policies and limits is reported to the Bank's Board 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 short-term borrowings to fund short-term assets or bridge temporary funding needs.

In addition to the volume, 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 wholesale funding, 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.

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 $42.8 billion, or 23% of total earning assets at June 30, 2022. Of these earning assets, the Bank has loans, which are currently adjustable and reprice with indices or mature within one year totaling $35.6 billion, or 23% of the total loan portfolio at June 30, 2022. The loan portfolio that reprices at least quarterly to market rate indices, such as Prime or LIBOR, totaled $25.7 billion, or 17% of the total loan portfolio at June 30, 2022. The loan portfolio with lagging indices, such as the COFI Repl Index or CMT, totaled $6.0 billion, or 4% of the total loan portfolio at June 30, 2022. Additionally, the loan portfolio that either (1) matures within one year or (2) is within one year of adjusting from the initial fixed-rate period totaled $3.8 billion, or 2% of the total loan portfolio at June 30, 2022. In addition, at June 30, 2022, the Bank held $5.7 billion in cash and $1.6 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 $118.6 billion, or 72% of total deposits at June 30, 2022. Total checking deposits include both noninterest-bearing checking accounts and interest-bearing checking accounts, which currently pay a nominal rate of interest, 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 $40.0 billion, or 24% of total deposits at June 30, 2022. CDs were $7.0 billion, or 4% of total deposits and had a weighted average remaining maturity of 6.3 months at June 30, 2022.

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 $4.7 billion at June 30, 2022 and had a weighted average remaining maturity of 1.9 years. We may also utilize short-term borrowings to fund short-term assets or bridge temporary funding needs. Such borrowings totaled $6.3 billion at June 30, 2022. In addition, the Bank has also issued unsecured, term, fixed-to-floating rate senior notes and fixed-rate subordinated notes. At June 30, 2022, the senior notes had a carrying value of $499 million and the subordinated notes had a carrying value of $779 million. The maturity dates and optional redemption dates for the senior and subordinated notes are discussed in Note 9 in "Item 1. Financial Statements."

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 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 June 30, 2022, 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%.

Change in Market Interest Rates	Estimated Increase (Decrease) in Net Interest Income	
	Twelve Months Ending June 30, 2023	Twelve Months Ending June 30, 2024
Shock:		
+200 bps immediately	6.9 %	8.1 %
+100 bps immediately	3.4 %	3.3 %
-100 bps immediately	(3.0)%	(7.8)%
Ramp:		
+200 bps over next 12 months	3.3 %	5.3 %
+100 bps over next 12 months	1.5 %	1.8 %
-100 bps over next 12 months	(1.2)%	(5.8)%

The Bank's net interest income sensitivity position is a combined result of the existing balance sheet and future growth projections as of June 30, 2022 indicating that assets are expected to overall reprice or roll off at a marginally faster pace than liabilities. This would generally be beneficial to net interest income in hypothetical parallel rising rate environments. Inversely, a parallel decline in rates would negatively impact net interest income. Net interest income asset sensitivity is presently driven by a combination of factors, including strong organic asset growth and favorable funding mix.

With respect to deposit balances, we model non-interest bearing and interest-bearing checking balances, which exclude money market checking, to gradually trend below the current level of 72% of total deposits over the two-year horizon. The results included herein reflect our current expectation of deposit behavior in the present macroeconomic environment, system liquidity and monetary policy.

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 principal executive officer and principal financial officer, supervised and participated in the evaluation. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures, as of June 30, 2022, were effective.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting during the quarter ended June 30, 2022 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 2021 Form 10-K. Any of the risks described in our 2021 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 second quarter of 2022, we sold 60,494 shares of common stock to eligible employees under our ESPP for aggregate cash consideration of $8 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 second quarter of 2022, we granted 38,656 RSUs, net of forfeitures, that have time-based vesting requirements. In addition, we granted 1,108,544 RSUs, net of forfeitures, that vest over time, provided certain performance criteria are achieved. We also granted 193,077 PSUs, net of forfeitures. These awards were granted to certain officers, employees, and directors and had an aggregate grant date fair value of $200 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.

Purchases of Equity Securities By the Issuer and Affiliated Purchasers

We did not repurchase any of our common stock during the second quarter of 2022.

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
10.1	First Republic Bank 2017 Omnibus Award Plan, as amended and restated effective May 17, 2022, incorporated by reference to Annex B of the Bank's Definitive Proxy Statement for the 2022 Annual Meeting of Shareholders on Schedule 14A filed on April 7, 2022.
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (1)
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (1)
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. (1)
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. (1)

(1) 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

August 8, 2022

/s/ Olga Tsokova

Olga Tsokova
Executive Vice President, Chief Financial Officer (Acting)
and Chief Accounting Officer
(Principal Financial Officer)

EXHIBIT 31.1

Certification of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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: August 8, 2022

/s/ Michael J. Roffler

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

EXHIBIT 31.2

Certification of Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Olga Tsokova, 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: August 8, 2022

/s/ Olga Tsokova
Name: Olga Tsokova
Title: Executive Vice President,
Chief Financial Officer (Acting) and
Chief Accounting Officer

EXHIBIT 32.1

Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002

The undersigned, the Principal 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 June 30, 2022 (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: August 8, 2022

/s/ Michael J. Roffler

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

EXHIBIT 32.2

Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002

The undersigned, the Principal 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 June 30, 2022 (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: August 8, 2022

/s/ Olga Tsokova

Name: Olga Tsokova
Title: Executive Vice President,
Chief Financial Officer (Acting) and
Chief Accounting Officer