FEDERAL DEPOSIT INSURANCE CORPORATION
WASHINGTON, D.C. 20429

FORM 10-K

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

For the fiscal year ended December 31, 2017

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	Name of each exchange on which registered
Common Stock, $0.01 par value	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.50% Noncumulative Perpetual Series D Preferred Stock	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 7.00% Noncumulative Perpetual Series E Preferred Stock	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.70% Noncumulative Perpetual Series F Preferred Stock	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.50% Noncumulative Perpetual Series G Preferred Stock	**New York Stock Exchange**
Depositary Shares, Each Representing a 1/40th Interest in a Share of 5.125% Noncumulative Perpetual Series H Preferred Stock	**New York Stock Exchange**

Securities registered pursuant to section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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 ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐
Emerging growth company ☐	

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the closing price of $100.10 as of June 30, 2017 was approximately $15.8 billion.

The number of shares outstanding of the Bank's common stock, par value $0.01 per share, as of February 9, 2018 was 161,773,556.

DOCUMENTS INCORPORATED BY REFERENCE

The following document is incorporated by reference in parts of the Form 10-K:

Portions of the Bank's definitive proxy statement for its annual meeting of shareholders to be held on May 15, 2018 (the "2018 Proxy Statement"), which will be filed within 120 days of the Bank's last fiscal year end, are incorporated in Part III of the Form 10-K.

The index to Exhibits appears on page 177.

FIRST REPUBLIC BANK

TABLE OF CONTENTS

PART I

Item 1.	Business	5
Item 1A.	Risk Factors	27
Item 1B.	Unresolved Staff Comments	47
Item 2.	Properties	47
Item 3.	Legal Proceedings	48
Item 4.	Mine Safety Disclosures	48

PART II

Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	48
Item 6.	Selected Financial Data	51
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	54
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	100
Item 8.	Financial Statements and Supplementary Data	104
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	176
Item 9A.	Controls and Procedures	176
Item 9B.	Other Information	176

PART III

Item 10.	Directors, Executive Officers and Corporate Governance	176
Item 11.	Executive Compensation	176
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	176
Item 13.	Certain Relationships and Related Transactions, and Director Independence	177
Item 14.	Principal Accounting Fees and Services	177

PART IV

Item 15.	Exhibits and Financial Statement Schedules	177
Item 16.	Form 10-K Summary	181

SIGNATURES

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 that was re-established as an independent institution in July 2010, including all its subsidiaries, as well as its predecessor entities, which had been in existence since 1985.

PART I

Information Regarding Forward-Looking Statements

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

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 loan losses, changes in nonperforming assets, impairment of investments and our allowance for loan losses;
- Projections about future levels of loan originations or loan repayments;
- Projections regarding costs, including the impact on our efficiency ratio; and
- Descriptions of assumptions underlying or relating to any of the foregoing.

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

- Significant competition to attract and retain banking and wealth management customers, from both traditional and non-traditional financial services and technology companies;

- Our ability to recruit and retain key managers, employees and board members;
- The possibility of earthquakes, fires and other natural disasters affecting the markets in which we operate;
- Interest rate risk and credit risk;
- Our ability to maintain and follow high underwriting standards;
- Economic and market conditions affecting the valuation of our investment securities portfolio, which could result in other-than-temporary impairment if the general economy deteriorates, credit ratings decline, the financial condition of issuers deteriorates, interest rates increase or the liquidity for securities is limited;
- Real estate prices generally and in our markets;
- Our geographic and product concentrations;
- Demand for our products and services;
- The regulatory environment in which we operate, our regulatory compliance and future regulatory requirements;
- The impact of tax reform legislation;
- The phase-in of the final capital rules regarding the Basel III framework, changes to the definitions and components of regulatory capital and a new approach for risk-weighted assets;
- Legislative and regulatory actions affecting us and the financial services industry, such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), including increased compliance costs, limitations on activities and requirements to hold additional capital;
- Our ability to avoid litigation and its associated costs and liabilities;
- The impact of new accounting standards;
- Future Federal Deposit Insurance Corporation (“FDIC”) special assessments or changes to regular assessments;
- Fraud, cybersecurity and privacy risks; and
- Custom technology preferences of our customers and our ability to successfully execute on initiatives relating to enhancements of our technology infrastructure, including client-facing systems and applications.

All forward-looking statements are necessarily only estimates of future results, and there can be no assurance that actual results will not differ materially from expectations, and, therefore, you are cautioned not to place undue reliance on such statements. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this Annual Report. 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.

Item 1. Business.

General

Founded in 1985, we are a California-chartered commercial bank and trust company headquartered in San Francisco with deposits insured by the FDIC. We specialize in providing personalized, relationship-based services, including private banking, private business banking, real estate lending and wealth management services, including trust and custody services, to clients in selected metropolitan areas in the United States. As of December 31, 2017, we had total assets of $87.8 billion, total deposits of $68.9 billion, total equity of $7.8 billion and wealth management assets under management or administration of $107.0 billion.

As of December 31, 2017, we provided our services through 76 offices, of which 70 are Preferred Banking licensed deposit-taking offices primarily in the following areas: San Francisco, Palo Alto, Los Angeles, Santa Barbara, Newport Beach and San Diego, California; Portland, Oregon; Boston, Massachusetts; Palm Beach, Florida; Greenwich, Connecticut; and New York, New York. We have 6 additional offices that offer exclusively lending, wealth management or trust services. Approximately 62% of our loans outstanding are in California as of December 31, 2017. We have been continuously headquartered in San Francisco since our inception.

We originate real estate-secured loans and other loans for retention in our loan portfolio, and historically have originated mortgage loans for sale to institutional investors or for securitization and sale in the secondary market.

We have an established record of meeting the credit needs of the communities where we operate and historically have met our obligations under the Community Reinvestment Act (the "CRA"). In particular, we lend to support community development projects, affordable housing programs and non-profit organizations that help economically disadvantaged individuals and to residents of low- and moderate- income census tracts, in each case consistent with prudent underwriting practices. We also make investments that benefit small businesses or low- and moderate- income communities in our footprint, including investing in small business investment companies, community development financial institutions and other similar organizations. We also donate to nonprofit organizations that offer a wide range of programs, including educational and health programs to economically disadvantaged students and families.

We also offer a broad array of internally managed investment services and, through an open architecture model, access to investments managed by unaffiliated advisors. Our wealth management services include a variety of investment strategies and products, trust and custody services, full service and online brokerage, financial and estate planning, access to alternative investments (private equity, venture capital, hedge and real estate funds), socially responsible investing, insurance and foreign exchange. We offer our wealth management services through First Republic Investment Management, Inc. ("FRIM"). We also offer brokerage services through First Republic Securities Company, LLC ("FRSC"). We provide trust services through First Republic Trust Company, a division of the Bank, and First Republic Trust Company of Delaware LLC ("FRTC Delaware") (collectively, the "Trust Company"). FRIM, FRSC and FRTC Delaware are wholly-owned subsidiaries of the Bank.

Gradifi, Inc. ("Gradifi") is a corporate provider of education related benefit plans. Through Gradifi, employers can make direct contributions to education debt repayment or savings plans for their employees. Gradifi is a wholly-owned subsidiary of the Bank.

We do not engage in proprietary trading or investment banking activities nor do we originate or trade in derivatives for our own account, and we do not have any current plans to engage in any of these activities.

We currently operate our business through two business segments: Commercial Banking and Wealth Management. For segment information, see the information in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Business Segments" and Note 22 in "Item 8. Financial Statements and Supplementary Data."

Our Business Strategy

Our core business principles and service-based culture have successfully guided our efforts over the past 32 years. We believe focusing on these principles will enable us to expand our capabilities for providing value-added services to our urban, coastal client base and generate steady, long-term growth.

Deliver Superior Client Service. We believe that stable long-term growth and profitability are the result of building strong client relationships one at a time while maintaining superior credit discipline. The most effective way to achieve this is through the continued delivery of superior, carefully coordinated client service without compromising the credit quality of our assets. Our employees strive to understand our clients' needs and identify appropriate financial solutions through our comprehensive suite of products and services. Our client-focused culture has allowed us to broaden and deepen these relationships over time. In turn, these clients do more business with us, along with the substantial portion of our new clients coming to us from "word-of-mouth" referrals from satisfied existing clients. We believe that delivering superior client service differentiates us from our competition.

Originate High Quality Loans. We have traditionally attracted new clients through our mortgage lending activities, providing an opportunity for our relationship managers to introduce other services to these clients. We remain committed to underwriting and originating high quality loans for existing and new clients. This enables us to expand our business in a disciplined manner while maintaining superior credit quality.

Grow Core Deposits. We focus on growing a high quality, low cost core deposit base. Our ability to do so has enabled us to reduce our reliance on wholesale funding, thereby resulting in a lower cost and more stable funding base. Core deposits, which include checking accounts, money market accounts, savings accounts and certificates of deposits ("CDs") (excluding CDs greater than $250,000 and all brokered deposits), represented 95% of total deposits at December 31, 2017. Our checking and savings deposits, which represent the majority of core deposits, have grown at a compounded annual growth rate of 23% for the past ten years. This growth is due to efforts across the entire business, including our relationship managers, branch office network, business bankers, Preferred Banking personnel and wealth management professionals.

Grow Our Wealth Management Business. We view our wealth management business as an opportunity for continued growth in fee income. We intend to continue to expand our wealth management business by hiring additional professionals and using our relationship-based approach to increase our assets under management or administration. We offer integrated investment management, trust, brokerage and foreign exchange services, which are an extension of our banking franchise. We believe that our brand name, superior client service and service culture will enable us to expand this business and diversify our income stream.

Attract and Retain High Quality Service Professionals. Attracting and retaining successful and high quality service professionals is critical to driving the development of our business and delivering superior financial performance. We have experienced low turnover in our client service personnel and intend to continue hiring and developing professionals who can establish and maintain long-term client relationships that are the key to our business, brand and culture. We believe our distinct business model, culture, scalable platform and incentive compensation structure enable us to attract and retain high quality service professionals.

Deposits

An important aspect of our franchise is the ability to gather deposits. As of December 31, 2017, we held $68.9 billion of total deposits. We have grown deposits at a compounded annual growth rate of 21% over the past five years. Based on the most recent publicly available regulatory filings, as of December 31, 2017, we were the 30th largest banking organization in the United States measured by total deposits. The following table presents our total deposits at the dates indicated:

($ in millions)	Total Deposits
As of December 31:	
2017	$ 68,919
2016	$ 58,602
2015	$ 47,893
2014	$ 37,131
2013	$ 32,083
2012	$ 27,088
5-year compounded annual growth rate	21%

As of December 31, 2017, our deposit base consisted of $43.7 billion, or 63%, in checking deposits, $18.0 billion, or 26%, in money market checking, savings and passbook deposits, and $7.2 billion, or 11%, in CDs.

Our deposit base reflects our value-added strategy of introducing deposits to loan clients, wealth management clients, businesses and non-profit organizations through three primary channels: (1) Preferred Banking Offices, which are our retail locations that gather deposits and service all of our clients; (2) deposits placed by clients who enter into deposit relationships directly with a relationship manager, business banker, preferred banker or wealth management professional; and (3) deposits swept from brokerage or other investment accounts. As of December 31, 2017, we held $23.3 billion of deposits associated with our Preferred Banking Offices and $39.9 billion of deposits associated with our Preferred Banking activities. In addition, we had wealth management deposits generated through our sweep programs totaling $4.4 billion at December 31, 2017.

Our Preferred Banking Offices have been a strong source of deposit growth in both established and new locations. Our Preferred Banking Offices are typically located in dense urban areas or supporting suburban areas. Of our existing offices, over half had total deposits over $200 million at December 31, 2017. Overall, deposits in our Preferred Banking Offices grew 23% during 2017. Preferred Banking Offices had average deposit balances of $325 million, representing a 16% increase in 2017. During 2017, deposit growth was driven by consumer and business checking accounts as well as CDs, and was the result from growth of existing client relationships, client referrals, our general marketing initiatives, growth in services offered to Bank clients and the service skills of individual employees.

Our Preferred Banking business is also a substantial source of deposits. We have nine Preferred Banking hub centers located in our key markets with specialized personnel that primarily support the clients of our relationship managers, business bankers and wealth management professionals. Deposits associated with our Preferred Banking channel have grown at a compounded annual growth rate of 21% in the last five years.

Our deposit base is also well-diversified geographically and by client type. As of December 31, 2017, 44% of our total deposits came from Northern California, 23% from New York, 13% from Southern California, 12% from Boston, 2% from other regions and 6% from wealth management sweep programs. As of December 31, 2017, 54% of our total deposits were from business clients, compared to 53% at December 31, 2016. As of December 31, 2017, 46% of our total deposits were from consumer clients, compared to 47% at December 31, 2016.

Lending Activities

Products

We offer a broad range of lending products to meet the needs of our clients, including residential mortgage loans, home equity lines of credit, multifamily loans, commercial real estate loans, residential construction loans and business loans. Our loan portfolio primarily consists of loans secured by single family residences, multifamily buildings and commercial real estate properties. Our strategy is to emphasize the origination of single family mortgage loans and to originate on a selective basis multifamily mortgages, commercial real estate mortgages, construction loans and other loans. We also originate business loans, including Eagle One loans and lines of credit, which are smaller loans and lines of credit to businesses, and personal loans, including Eagle Professional loans, which offer individuals the ability to borrow for capital and partnership requirements, and Eagle Gold All-in-One loans made to individuals for refinancing existing education debt.

Our strategy includes lending to borrowers who are successful professionals, business executives or entrepreneurs who are buying or refinancing homes in metropolitan communities, thereby creating the opportunity to offer related products and services.

Single Family Residential. As of December 31, 2017, the recorded investment of single family real estate secured loans, including loans held for sale, represented $31.6 billion, or 51% of our loan portfolio. As of December 31, 2017, these loans had a weighted average loan-to-value ratio ("LTV") at origination of approximately 58%. Many of our borrowers have high liquidity and substantial net worth. Additionally, we offer specific loan programs for first-time homebuyers and also to borrowers with low to moderate incomes. Our Eagle Community loan program offers special fixed rates to borrowers in historically underserved communities. Our single family loans are secured by single family detached homes, condominiums, cooperative apartments and two-to-four unit properties. Due to our larger than average loan size ($1.1 million based on outstanding loans at December 31, 2017), the number of single family loans originated by us is relatively small (approximately 12,000 for 2017), allowing our relationship managers and the executive loan approval team of 34 Executive Loan Committee members to carefully underwrite and provide high quality service for each loan. Repeat clients or their direct referrals are the most important source of our loan originations.

Home Equity Lines of Credit ("HELOCs"). As of December 31, 2017, the recorded investment of HELOCs was $2.7 billion, or 4% of our total loan portfolio, and the unused remaining balance was $4.7 billion. We offer HELOCs consisting of loans secured by first or second deeds of trust on primarily owner-occupied primary residences. The majority of these lines are in a secured position behind a first mortgage originated by us or in a first-lien position. As of December 31, 2017, approximately 37% of HELOCs are in first lien position, and approximately 48% of HELOCs are in second lien position behind a first residential mortgage originated by us, including loans subsequently sold to investors. As of December 31, 2017, the average commitment size of HELOCs was approximately $534,000, and the weighted average combined LTV including the first residential mortgage, if any, at origination was approximately 52%. Generally, these loans bear interest rates that vary with the prime rate. These lines have a 25-year maturity with interest-only payments for the first 10 years and are fully amortizing over the last 15 years.

Multifamily. As of December 31, 2017, the recorded investment of loans secured by multifamily properties totaled $8.6 billion, or 13% of our total loan portfolio. The loans are predominantly for established buildings in the urban neighborhoods of our markets. The buildings securing our multifamily loans are, generally, seasoned operating properties with proven occupancy, rental rates and expense levels. The neighborhoods tend to be densely populated; the properties are close to employment opportunities; and rent levels are appropriate for the target occupants. Generally, the borrowers are property owners who are experienced at managing these properties. We typically have recourse directly against the borrower on these loans due to receiving a personal guaranty from the borrower. As of December 31, 2017, the average multifamily mortgage loan commitment size was approximately $2.6 million, and the weighted average LTV at origination was approximately 52%.

Commercial Real Estate. As of December 31, 2017, the recorded investment of commercial real estate loans was $6.1 billion, or 10% of our loan portfolio. We originate commercial real estate loans, primarily to existing clients. We typically have recourse directly against the borrower on these loans and receive a personal guaranty from the borrower. We are primarily an urban lender. The real estate securing our existing commercial real estate loans includes a wide variety of property types, such as mixed-use residential/commercial, retail properties, office buildings, office/warehouses, hotels, motels and healthcare facilities. At the time of loan closing, the properties are generally completed and occupied. As of December 31, 2017, the average commercial real estate loan commitment size was approximately $3.1 million, and the weighted average LTV at origination was approximately 48%.

Business. As of December 31, 2017, the recorded investment of business loans and lines of credit was $8.3 billion, or 13% of total loans outstanding. Of this total, $4.2 billion was in the form of lines of credit with additional undisbursed commitments of $8.2 billion. The business loan portfolio is comprised primarily of capital call lines to private equity and venture capital funds, loans to independent schools and other non-profit organizations, operating lines of credit to professional service firms and term loans to enable business clients to acquire capital equipment.

We originate Eagle One loans, which are smaller loans or lines of credit to businesses, generally in amounts of up to $350,000. These Eagle One loans are generally made to meet the working capital needs of small businesses. Such loans are either revolving lines of credit or term loans and are adjustable based on the prime rate. These loans or lines of credit are guaranteed by the business owners personally. As of December 31, 2017, we had outstanding Eagle One loans and lines of credit of $47.6 million and had undisbursed commitments of $99.0 million.

Construction. As of December 31, 2017, the recorded investment of construction loans was $1.7 billion, or 3% of total loans outstanding. Our construction loan portfolio includes loans to individual clients for the construction and ownership of single family homes, primarily in our California and New York markets and, to a lesser extent, to construct other types of properties. These loans are typically disbursed as construction progresses, carry interest rates that vary with the prime rate and can be converted into a permanent mortgage loan once the property is occupied. We had undisbursed commitments of $1.7 billion related to our construction loan portfolio. As of December 31, 2017, the average construction loan commitment size was approximately $5.2 million, and the weighted average LTV at origination was approximately 55%.

Stock Secured. As of December 31, 2017, the recorded investment of stock secured loans was $1.1 billion, or 2% of total loans outstanding. There were additional undisbursed commitments of $1.3 billion related to stock secured loans.

Other Secured. As of December 31, 2017, the recorded investment of other secured loans was $1.0 billion, or 2% of total loans outstanding and we had undisbursed commitments of $862.8 million. These loans include Eagle Professional loans, which offer individuals an ability to borrow for capital and partnership requirements. As of December 31, 2017, we had outstanding Eagle Professional loans of $796.7 million and had undisbursed commitments of $804.7 million.

Unsecured. As of December 31, 2017, the recorded investment of unsecured loans and lines of credit was $1.8 billion, or 3% of total loans outstanding. Unsecured loans include Eagle Gold All-in-One term loans made to individuals for refinancing existing education debt at competitive fixed rates. At December 31, 2017, such loans had outstanding balances of $1.4 billion. In addition, unsecured loans at December 31, 2017 consist of outstanding lines of credit of $263.0 million and undisbursed commitments of $551.6 million. Unsecured lines of credit are originated to meet the non-mortgage needs of our clients. Such loans generally have a shorter term to maturity, are adjustable with the prime rate or the London Interbank Offered Rate ("LIBOR") and are subject to annual or more frequent review.

Underwriting

We have developed disciplined underwriting standards that have remained consistent through varying business cycles. We seek to diversify our loans among market areas, loan types and industries. Our underwriting standards include a matrix of approval requirements that vary depending on the size and type of loan and our aggregate exposure to the borrower. The underwriting process is intended to assess the prospective borrower's credit standing, the ability to repay and the value and adequacy of any collateral. To assess the borrower's ability to repay, we analyze the borrower's cash flow, liquidity, credit standing, employment history and overall financial condition. We evaluate our borrowers who choose adjustable-rate loans at a rate that exceeds the initial start rate. This allows us to make a determination as to whether the borrower is able to make higher loan payments in the event that interest rates increase subsequent to origination. We do not originate loans with "teaser" rates. We do not originate single family loans with the characteristics typically described as "subprime" or "high cost," such as loans made to borrowers with little or no cash reserves and poor or limited credit using limited income documentation. Over the past two years, the home loans originated by us had a weighted average credit score of 762. In addition, many of our borrowers have high liquidity and substantial net worth. We underwrite home loans using full documentation.

The median attributes of clients who have obtained home loans from us over the last two years are as follows:

	Median
Loan Size	$ 666,000
LTV	59%
Liquidity	$ 595,000
Credit Score	772

Our loan origination policies and consistent underwriting standards have resulted in a low historical loan loss experience. Since our inception in 1985, we have originated $114.5 billion of single family residential loans (including HELOCs) and have experienced cumulative net loan losses of only $38.6 million, or 3 basis points, in 32 years (including losses on loans sold).

Our loan charge-off experience on all loan types for the last fifteen years (as reported in our financial statements) is presented in the following table. From 2009 through 2017, net loan losses include charge-offs against the allowance for loan losses and charge-offs recorded as a reduction in unaccreted discounts established in purchase accounting.

	Net Charge-Offs (Recoveries)	
($ in millions)	**Ratio [1]**	**Amount**
Year ended December 31:		
2017	0.00%	$ 0.9
2016	0.00%	$ 1.9
2015	0.01%	$ 2.1
2014	0.01%	$ 2.2
2013	0.05%	$ 14.2
2012	0.01%	$ 1.9
2011	0.03%	$ 5.2
2010	0.09%	$ 16.3
2009	0.48%	$ 84.1
2008	0.08%	$ 11.9
2007	0.01%	$ 0.9
2006	(0.06)%	$ (4.4)
2005	(0.02)%	$ (0.9)
2004	0.01%	$ 0.7
2003	0.10%	$ 4.3

[1] Represents net charge-offs (recoveries) to average loans during each year.

Our charge-off ratio was less than 0.5% of average loans at its highest in 2009, and net charge-offs have averaged 4 basis points of average loans outstanding, per year, over the past fifteen years.

Credit Risk Management

Credit risk management involves a partnership between our relationship managers, business bankers and our credit approval, credit administration and collections personnel. We conduct weekly loan meetings, attended by nearly all of our senior management, relationship managers, related loan production staff and credit administration staff, at which asset quality and delinquencies are reviewed. Our compensation program for our relationship managers has included meaningful credit claw back provisions since 1986 on all loan originations to encourage our personnel to avoid and monitor for credit delinquency issues, which we believe leads the relationship manager to focus on high quality credit consistent with our strategic focus on asset quality.

In accordance with our procedures, we perform annual reviews of our larger multifamily, commercial real estate and business loans. As part of these review procedures, we analyze recent financial statements of the property and/or borrower to determine the current level of occupancy, revenues and expenses and to investigate any deterioration in the value of the real estate collateral or in the borrower's financial condition. Upon completion, we update the grade assigned to each loan. We maintain a list of loans that receive additional attention if we believe there may be a potential credit risk. Relationship managers are encouraged to bring potential credit issues to the attention of credit administration personnel in a timely manner.

For loans that are criticized or classified, the Bank's Special Assets Committee reviews loan grades, reserves and accrual status on a quarterly or more frequent basis. This review includes an evaluation of the market conditions, the property's trends, the borrower and guarantor status, the level of reserves required and loan accrual status. Additionally, we have an independent, third-party review performed on our loan grades and our credit administration functions each year. The results of the third-party review are presented to the Audit Committee of the Board of Directors. These asset review procedures provide management with additional information for assessing our asset quality. In addition, for business and personal loans that are not secured by real estate, we perform frequent evaluations and regular monitoring.

Mortgage Banking Activities

Secondary Market Loan Sales

We have historically and regularly accessed the capital markets to sell into the secondary markets residential and, to a lesser extent, multifamily and commercial real estate loans that we originate. We sell loans on a non-recourse basis to provide funds for additional lending and to manage our asset/liability position. We retain all the loan servicing in order to maintain the primary contact with our clients and to generate recurring fee income. Secondary marketing has allowed us to make loans to clients during periods when deposit flows decline and when clients prefer loans with characteristics that we choose not to retain in our loan portfolio.

We transact loan sales through whole loan sales on a flow basis and bulk loan sales. Whole loan sales generally focus on intermediate-term hybrid adjustable-rate mortgage ("ARM") loans and longer-term fixed-rate loans and are typically made to specific investors according to predetermined underwriting standards. We have historically sold whole loans to the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac") and various institutional purchasers such as investment banks, real estate investment trusts, mortgage conduits and other financial institutions.

Bulk sales provide an opportunity for us to take advantage of market opportunities for different products and are done either on an auction basis or negotiated with a single investor.

In 2017, we sold $2.9 billion of loans, compared to $3.1 billion in 2016 and $2.4 billion in 2015. We use loan sales in the ordinary course of business to help provide a full range of lending options for our clients, while also managing asset growth and interest rate risk.

Loan Servicing

We have historically retained the servicing on substantially all loans sold to institutional investors, thereby generating ongoing servicing revenues and maintaining client relationships. Loan servicing activities include collecting and remitting loan payments, accounting for principal and interest, responding to client inquiries, holding escrow (impound) funds for payment of taxes and insurance, making inspections as required of the mortgaged property, collecting amounts due from delinquent mortgagors, supervising foreclosures in the event of unremedied defaults and generally administering the loans for the investors to whom they have been sold. Management believes that the quality of our loan servicing capability is a factor that permits us to sell our loans in the secondary market.

Our mortgage loan servicing portfolio was $12.5 billion as of December 31, 2017. Approximately 69% of total loans serviced as of December 31, 2017 had outstanding balances greater than $636,150, which is the maximum conforming loan amount for a single family loan. Of the total loans serviced as of December 31, 2017, approximately 50% were hybrid ARMs with a weighted average contractual rate of 3.05%, 42% were fixed-rate loans with a weighted average contractual rate of 3.69%, and 8% were adjustable-rate loans with a weighted average contractual rate of 3.00%. The weighted average contractual rate of the total loans serviced was 3.31% as of December 31, 2017. When we collect monthly mortgage payments, we retain the servicing fees, ranging generally from 0.25% to 0.375% per annum on the declining principal balances of the loans. The weighted average servicing fee collected was 0.25% for 2017. Our servicing portfolio is reduced by normal amortization and prepayment or liquidation of outstanding loans. Many of the existing servicing programs provide for principal and interest payments to be remitted by us, as servicer, to the investor, whether or not received from the borrower. Upon ultimate collection, including the sale of foreclosed property, we are entitled to recover any such advances plus late charges before paying the investor. We believe our collection and foreclosure procedures comply with all applicable laws and regulations. We currently have a relatively low number of loans in the process of foreclosure and have not needed to suspend any of our foreclosure activities.

Private Wealth Management Activities

A primary focus of our general business strategy has been to expand our capabilities for providing value-added services to a targeted higher net worth client base. We attract wealth management clients by hiring additional wealth management professionals and providing superior client service. In addition, our relationship-based approach allows us to grow existing client relationships, attract referrals from existing clients and attract banking clients that have been satisfied with our mortgage loan origination products and services and deposit services, which provides us with an opportunity for our relationship managers to introduce other products and services, such as wealth management. Wealth management assets under management (“AUM”) or administration (“AUA”) were $107.0 billion at December 31, 2017.

Investment Management Services. We provide traditional portfolio management and customized client portfolios through our subsidiary, FRIM. When appropriate and desired by a client, our advisors use third-party managers or funds through an open architecture platform. AUM were $52.7 billion as of December 31, 2017.

Brokerage and Investment Activities. For full-service brokerage clients, we perform brokerage and investment activities through FRSC. We employ wealth managers to acquire equity securities, treasury securities, municipal bonds, other fixed income securities, money market mutual funds and other shorter-term liquid investments at the request of clients or their financial advisors. In addition, wealth managers offer sales of insurance and annuity products to clients. We also offer online services for self-directed brokerage accounts for those clients who choose to transact in this manner. Our online brokerage services allow clients to place orders for equities, mutual funds and listed options. As of December 31, 2017, AUA were $44.7 billion. Such assets were held in brokerage or managed accounts. All brokerage transactions we conduct are cleared by Pershing LLC, a wholly-owned subsidiary of The Bank of New York Mellon Corporation.

Trust Company. First Republic Trust Company, a division of the Bank, operates in California, Oregon, Washington, New York, Massachusetts, Florida and Connecticut and specializes in personal trust activities.

FRTC Delaware, a subsidiary of the Bank, operates in Delaware. First Republic Trust Company and FRTC Delaware draw new trust clients from our banking and wealth management client base, as well as from outside of our organization. The Trust Company has gathered $9.6 billion of assets under custody or administration as of December 31, 2017.

Foreign Exchange. We earn fees from transacting foreign exchange business on behalf of our 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.

Information Technology Systems

We devote significant resources to maintain modern, efficient, secure and scalable information technology systems. We outsource most of our processing and services, which allows us to select the best provider in each market niche, reduce our costs by leveraging the vendors' economies of scale and expand our capabilities as needed. We use several different vendors for our core systems so that we are not tied to a single provider and can upgrade systems individually without significant disruption. We continue to invest in enhancing our mobile and online banking platform in order to increase our efficiency and to improve the overall client experience. In 2017, our information systems expenses were $208.6 million.

We are committed to protecting our clients' data. We closely monitor information security at First Republic and in the financial services sector generally for trends and new threats, including cybersecurity risks. We have initiatives to continuously improve the security and privacy of our systems and data. To protect against disasters, we have backup data centers on the west and east coasts. We have established a committee of the Board of Directors, which oversees our cybersecurity and general technology efforts.

Competition

We face strong competition in gathering deposits, making loans and obtaining client assets for management or administration by investment management, trust and brokerage operations. We compete for deposits and loans by seeking to provide a higher level of personal service than is generally offered by larger and non-bank competitors, by advertising, and by offering competitive interest rates. We generally do not have a dominant market share of the total deposit gathering or lending activities in the areas in which we conduct operations.

Our management believes that our most direct competition for deposits comes from commercial banks, savings and loan associations, credit unions, money market funds and brokerage firms, nationwide and regional banks specializing in private banking and service-focused community banks that target the same clients we do. In addition, our cost of funds fluctuates with market interest rates and may be affected by higher rates being offered by other financial institutions. During certain interest rate environments, additional significant competition for deposits may be expected to arise from corporate and government debt securities and money market mutual funds.

Our competition in making loans comes principally from commercial banks, mortgage companies, savings and loan associations, insurance companies and full service brokerage firms, particularly large, nationwide institutions. Many of the nation's largest commercial banks and mortgage companies have a significant number of branch offices in the areas in which we operate. Aggressive pricing policies of our competitors on new ARMs, intermediate-fixed rate and fixed-rate loans, especially during a period of declining mortgage loan originations, have in the past resulted in a decrease in our mortgage loan origination volume and a decrease in the profitability of our loan originations. We compete for loans principally through the quality of service we provide to borrowers, real estate brokers and loan agents, while seeking to maintain competitive interest rates, loan fees and other loan terms.

Our competition in wealth management services comes primarily from commercial banks, trust companies, mutual funds, investment management firms, stock brokers and other financial services companies, as well as private equity firms, hedge funds and other alternative investment strategies. Competition is especially keen in our principal markets because numerous well-established and successful investment management firms exist throughout each of the markets in which we operate. We compete for wealth management clients through the scope of products offered, level of investment performance, fees and client service.

Regulatory restrictions on interstate bank branching and acquisitions and on banks providing a broader array of financial services, such as securities underwriting and dealing and insurance, have been reduced or eliminated. The availability of banking services over the Internet and on mobile devices continues to expand. Changes in laws and regulations governing the financial services industry cannot be predicted; however, past legislation has served to intensify our competitive environment.

Employees

As of December 31, 2017, we had 4,025 full-time equivalent employees, including temporary employees and independent contractors. Our management believes that its relations with employees are satisfactory. We are not a party to any collective bargaining agreements.

Supervision and Regulation

Described below are the material elements of selected laws and regulations applicable to us and our subsidiaries. The descriptions are not intended to be complete and are qualified in their entirety by reference to the full text of the statutes and regulations described. Changes in applicable laws or regulations, and in their interpretation and application by regulatory agencies and other governmental authorities, cannot be predicted, but may have a material effect on our business, results of operations or financial condition of the business, or results of operations or financial condition of our subsidiaries.

Overview

We are subject to extensive federal and state banking laws, regulations and policies that are intended primarily for the protection of clients, depositors and other consumers, the FDIC's Deposit Insurance Fund (the "DIF"), and the banking system as a whole; not for the protection of our other creditors and shareholders. We are examined, supervised and regulated by the California Department of Business Oversight's Division of Financial Institutions (the "DBO") and the FDIC (our primary federal regulator) as an insured state bank without a holding company that is not a member of the Federal Reserve System (the "Federal Reserve"). The statutes enforced by, and regulations and policies of, these agencies affect most aspects of our business, including prescribing permissible types of loans and investments, the amount of required reserves, requirements for branch offices, the permissible scope of our activities and various other requirements. Although we are not a member of the Federal Reserve, we are subject to certain regulations of the Board of Governors of the Federal Reserve, such as those dealing with check clearing activities (Regulation CC) and establishment of reserves against deposits (Regulation D). Additionally, our offices in states other than California are subject to more limited supervision and regulation by the applicable state bank regulatory agency. In addition, certain of our subsidiaries are subject to regulation, supervision and examination by other regulatory authorities, including the Securities and Exchange Commission ("SEC"), Financial Industry Regulatory Authority ("FINRA") and, in relation to our sale of insurance products, state insurance regulatory agencies.

Our deposits are insured by the FDIC to the fullest extent permissible by law. As an insurer of deposits, the FDIC issues regulations, conducts examinations, requires the filing of reports and generally supervises the operations of all institutions to which it provides deposit insurance. The approval of the FDIC is required for certain transactions in which we may engage, including any merger or consolidation by us (including the acquisition of another bank), a change in control over us, or the establishment or relocation of any of our branch

offices. In reviewing applications seeking approval of such transactions, the FDIC may consider, among other things, the competitive effect and public benefits of the transactions, the capital position, financial and managerial resources and future prospects of the organizations involved in the transaction, the risks to the stability of the U.S. banking or financial system, the applicant's performance record under the CRA (see "Community Reinvestment Act and Fair Lending" below) and the effectiveness of the organizations involved in the transaction in combating money laundering activities. The FDIC also has the power to prohibit these and other transactions even if approval is not required, and could do so if we have otherwise failed to comply with all laws and regulations applicable to us. We are also subject to supervision, regulation, examination and enforcement by the Consumer Financial Protection Bureau ("CFPB") with respect to consumer protection laws and regulations.

Proposals to change the laws and regulations governing the banking industry are frequently introduced in Congress, in the state legislatures and before the various banking regulatory agencies. The Dodd-Frank Act, which was enacted in July 2010, significantly restructured the financial regulatory regime in the United States. Provisions of the Dodd-Frank Act that have had or may have a material effect on our business include, among others, repealing the federal prohibitions on the payment of interest on demand deposits, thereby permitting depository institutions to pay interest on corporate transaction and other accounts, and imposing additional underwriting standards on mortgages and restricting so-called "high-cost mortgages," including certain mortgages with prepayment penalties. Many aspects of the Dodd-Frank Act are the subject of rulemakings. These existing and future rulemakings have resulted, and may continue to result, in a significant cost of compliance.

Provisions of the Dodd-Frank Act, and increased expectations of our banking regulators more generally, that may have a material effect on our results of operations include, among others, the imposition of additional underwriting standards on mortgages and increased expenses due to heightened regulatory requirements and standards imposed on larger institutions, including: capital and liquidity stress testing, resolution planning, internal audit standards, enterprise risk management standards, and enhanced compliance and standards for internal controls relating to anti-money laundering ("AML"), the Bank Secrecy Act ("BSA") and other matters. In addition, financial institutions with at least $50 billion in total consolidated banking assets are generally subject to enhanced supervision, both formally and informally, including heightened standards relating to capital stress testing, liquidity stress testing, the establishment and maintenance of a formal resolution plan and an "enhanced" Volcker Rule compliance program. However, as a result of recent political developments, including the change in presidential administrations in the United States, certain elements of the Dodd-Frank Act and its associated regulations could be changed, although the timing and extent to which this may occur is presently uncertain.

California Law

California law governs the licensing and regulation of California commercial banks, including organizational and capital requirements, fiduciary powers, investment authority, branch offices and electronic terminals, declaration of dividends, changes of control and mergers, out of state activities, interstate branching and banking, debt offerings, borrowing limits, limits on loans to one obligor, liquidation, sale of shares or options in the Bank to its directors, officers, employees and others, the purchase by the Bank of its own shares, and the issuance of capital notes or debentures. The DBO is charged with our supervision and regulation.

Under California law, there is no interest rate limitation on loans. However, for certain types of secured loans, California law imposes minimum collateral requirements. In addition, there are certain term and amortization restrictions on loans secured by real property.

Unsecured loans to one person generally may not exceed 15% of the sum of a bank's capital stock, allowance for loan losses and capital notes and debentures, and both secured and unsecured loans to one person (excluding certain secured lending and letters of credit) at any given time generally may not exceed 25% of the sum of a bank's capital stock, allowance for loan losses and capital notes and debentures. Except for limitations

on the amount of loans to a single borrower, loans secured by real or personal property may be made to any person without regard to the location or nature of the collateral. We are required to invest our funds in accordance with limitations under California law and may only make investments that are permissible investments for banks, subject to any limitations under any other applicable law.

Under California law, the amount a bank generally may borrow may not exceed its shareholders' equity without the consent of the DBO, except for borrowings from the Federal Home Loan Bank and the Federal Reserve Bank.

In addition to remedies available to the FDIC (which are discussed below), the Commissioner of the DBO (the "Commissioner") may take possession of a bank if certain conditions exist such as insufficient shareholders' equity, unsafe or unauthorized operations, or violation of law.

Capital Requirements

The federal banking agencies have risk-based capital adequacy guidelines intended to provide a measure of capital adequacy that reflects the degree of risk associated with a banking organization's operations both for transactions reported on the balance sheet as assets and for transactions, such as letters of credit and recourse arrangements, that are recorded as off-balance sheet items. The Basel Committee on Banking Supervision (the "Basel Committee") established rules that implement the December 2010 final capital framework ("Basel III"). These rules became effective as of January 1, 2015 and are described below.

The Basel Committee is a committee of central banks and bank supervisors and regulators from the major industrialized countries that develops broad policy guidelines for use by each country's supervisors in determining the supervisory policies they apply. Under these guidelines, assets are assigned to one of several risk categories, and nominal dollar amounts of assets and credit equivalent amounts of off-balance sheet items are multiplied by the risk adjustment percentage for that category, which generally range from 0% for assets with low credit risk, such as certain U.S. government securities, to 200% for assets with relatively higher credit risk.

In determining the capital level that we are required to maintain, the federal banking agencies do not follow accounting principles generally accepted in the United States ("GAAP") in all respects and have special rules that may have the effect of reducing the amount of capital they will recognize for purposes of determining our capital adequacy.

In connection with the capital requirements (described below), the FDIC has adopted regulations and guidance that mandate consideration of concentrations of credit risk and risks from non-traditional activities, as well as an institution's ability to manage those risks, when determining the adequacy of an institution's capital. This evaluation is part of the institution's regular safety and soundness examination. The FDIC also adopted regulations requiring consideration of general market risk, including interest rate risk (when the interest rate sensitivity of an institution's assets does not match the sensitivity of its liabilities or its off-balance sheet position), in the evaluation of a financial institution's capital adequacy.

In July 2013, the FDIC, our primary federal regulator, approved a final rule (the "Basel III Capital Rules") that was issued jointly by the federal banking agencies, which established a new comprehensive capital framework for U.S. banking organizations. The Basel III Capital Rules generally implemented the Basel III framework. The Basel III Capital Rules substantially revised the risk-based capital requirements applicable to bank holding companies and depository institutions, including us, compared to the previous U.S. risk-based capital rules. The Basel III Capital Rules revised the definitions and the components of regulatory capital, and addressed other issues affecting the numerator in banking institutions' regulatory capital ratios. The Basel III Capital Rules also addressed asset risk weights and other matters affecting the denominator in banking institutions' regulatory capital ratios and replaced the previous general risk-weighting approach, which was derived from the "Basel I" capital accords, with a more risk-sensitive approach based, in part, on the

"standardized approach" in the Basel Committee's 2004 "Basel II" capital accords. In addition, the Basel III Capital Rules implemented certain provisions of the Dodd-Frank Act, including the requirements of Section 939A to remove references to credit ratings from the federal banking agencies' rules. The Basel III Capital Rules, which became effective as of January 1, 2015, are subject to phase-in periods for certain of their components and other provisions through the end of 2018. In November 2017, the FDIC adopted a final rule, the "Retention of Certain Existing Transition Provisions for Banking Organizations That Are Not Subject to the Advanced Approaches Capital Rules," that was issued jointly by the federal banking agencies, which extended the existing transition provisions under the regulatory capital rules for a targeted set of items, including certain regulatory capital deductions and risk weights as well as certain minority interest requirements for banking organizations not subject to the advanced approaches capital rules, such as the Bank. As such, the transition provisions for certain items will not be fully phased-in until the simplifications notice of proposed rulemaking, the "Simplifications to the Capital Rule Pursuant to the Economic Growth and Regulatory Paperwork Reduction Act of 1996," is completed or the agencies otherwise determine.

Among other matters, the Basel III Capital Rules: (i) introduced a new capital measure called "Common Equity Tier 1" ("CET1") and related regulatory capital ratio of CET1 to risk-weighted assets; (ii) specified that Tier 1 capital consists of CET1 and "Additional Tier 1 capital" instruments, which are instruments treated as Tier 1 instruments under the prior capital rules that meet certain revised requirements; (iii) mandated that most deductions or adjustments to regulatory capital measures be made to CET1 and not to the other components of capital; and (iv) expanded the scope of the deductions from and adjustments to capital as compared to existing regulations. Under the Basel III Capital Rules, for most banking organizations, including us, the most common form of Additional Tier 1 capital is noncumulative perpetual preferred stock and the most common form of Tier 2 capital is subordinated notes and a portion of the allowance for loan and lease losses, in each case, subject to the Basel III Capital Rules' specific requirements.

The Basel III Capital Rules also introduced a "capital conservation buffer." The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a ratio of CET1 to risk-weighted assets 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. The implementation of the capital conservation buffer began on January 1, 2016 at 0.625% and will be phased in over a four-year period (increasing by that amount on each subsequent January 1, until it reaches 2.5% on January 1, 2019). Thus, when fully phased in on January 1, 2019, the Bank will be required to maintain this additional capital conservation buffer of 2.5% of risk-weighted assets. The following table presents the minimum capital ratios applicable to us under the Basel III Capital Rules as of the dates indicated:

	January 1,				
Capital Measure	**2015**	**2016**	**2017**	**2018**	**2019**
Capital conservation buffer	—	0.625%	1.25%	1.875%	2.5%
CET1 including capital conservation buffer	4.5%	5.125%	5.75%	6.375%	7.0%
Tier 1 risk-based capital including capital conservation buffer	6.0%	6.625%	7.25%	7.875%	8.5%
Total risk-based capital including capital conservation buffer	8.0%	8.625%	9.25%	9.875%	10.5%
Tier 1 leverage	4.0%	4.0%	4.0%	4.0%	4.0%

The Basel III Capital Rules provide for a number of deductions from and adjustments to CET1. These include, for example, the requirement that (i) mortgage servicing rights ("MSRs"), (ii) deferred tax assets ("DTAs") arising from temporary differences that could not be realized through net operating loss carrybacks and (iii) significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such items, in the aggregate, exceed 15% of CET1. Implementation of the deductions and other adjustments to CET1 began on January 1, 2015 and will be phased in over a four-year period (beginning at 40% on January 1, 2015 and an additional 20% per year thereafter) except for certain items for which existing transition provisions in effect for 2017 have been extended.

Under the Basel III Capital Rules, the effects of certain accumulated other comprehensive income or loss items are not excluded from determining regulatory capital ratios; however, non-advanced approaches banking organizations, including the Bank, may make a one-time permanent election to continue to exclude these items. The Bank has elected to exclude these items in order to avoid significant variations in the level of capital depending upon the impact of interest rate fluctuations on the fair value of its available-for-sale securities portfolio.

The Basel III Capital Rules prescribe a standardized approach for risk weightings that depend on the nature of the assets, generally ranging from 0% for U.S. government and agency securities, to 600% for certain equity exposures, and result in higher risk weights for a variety of asset classes, including certain commercial real estate mortgages.

Prompt Corrective Action and Other Enforcement Mechanisms

The Federal Deposit Insurance Act, as amended ("FDIA"), as added by the Federal Deposit Insurance Corporation Improvement Act of 1991, requires the appropriate federal banking agency to take prompt corrective action to resolve the problems of insured depository institutions, including those that fall below one or more prescribed minimum capital ratios. The law requires each federal banking agency to promulgate regulations defining the following five categories in which an insured depository institution will be placed, based on the level of its capital ratios: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized.

Under the prompt corrective action provisions of the FDIA, an insured depository institution generally will be classified in the applicable category based on the capital measures indicated in the table below:

Capital Measure	Well-Capitalized	Adequately Capitalized	Undercapitalized	Significantly Undercapitalized
Tier 1 leverage ratio	5% or greater	4% or greater	Less than 4%	Less than 3%
CET1 ratio	6.5% or greater	4.5% or greater	Less than 4.5%	Less than 3%
Tier 1 risk-based capital ratio	8% or greater	6% or greater	Less than 6%	Less than 4%
Total risk-based capital ratio	10% or greater	8% or greater	Less than 8%	Less than 6%

An institution that is classified as "well-capitalized" based on its capital levels may be classified as "adequately capitalized," and an institution that is "adequately capitalized" or "undercapitalized" based upon its capital levels may be treated as though it were undercapitalized or significantly undercapitalized, respectively, if the appropriate federal banking agency, after notice and opportunity for hearing, determines that an unsafe or unsound condition or an unsafe or unsound practice warrants such treatment. At each successive lower capital category, an insured depository institution is subject to progressively more restrictive constraints on operations, management and capital distributions, as the capital category of an institution declines. Failure to meet the capital requirements could also subject a depository institution to capital raising requirements. Ultimately, critically undercapitalized institutions (with tangible equity to total assets of 2% or less) are subject to the appointment of a receiver or conservator.

As of December 31, 2017, the Bank was "well-capitalized" under the prompt corrective action requirements currently in effect, based on the aforementioned ratios.

In addition to measures taken under the prompt corrective action provisions, commercial banking organizations may be subject to potential enforcement actions by the federal banking agencies for unsafe or unsound practices in conducting their businesses or for violations of any law, rule, regulation, condition imposed in writing by the agency or written agreement with the agency. Enforcement actions may include the issuance of formal and informal agreements, the issuance of a cease-and-desist order that can be judicially enforced, the issuance of directives to increase capital, the imposition of civil money penalties, the issuance of removal and

prohibition orders against institution-affiliated parties, the termination of insurance of deposits, the imposition of a conservator or receiver, and the enforcement of such actions through injunctions or restraining orders based upon a judicial determination that the agency would be harmed if such equitable relief was not granted.

Annual Capital Stress Tests

In October 2012, as required by Section 165(i) of the Dodd-Frank Act, the FDIC issued final rules regarding bank-run stress testing. The rules require certain financial companies with average total consolidated assets greater than $10 billion, including FDIC-insured state non-member banks such as us, to conduct an annual company-run stress test of capital, consolidated earnings and losses under one base scenario and at least two stress scenarios provided by the appropriate federal regulatory agency, which is, in our case, the FDIC. Implementation of the rules for covered institutions with total consolidated assets between $10 billion and $50 billion began in 2013. Effective January 1, 2016, the company-run stress tests are conducted using data as of December 31 of the relevant fiscal year and the scenarios selected by the federal banking agencies. As a bank with over $50 billion in total consolidated assets, we must report our stress test results to the FDIC by the following April 5 and publicly disclose the summary results between June 15 and July 15.

Liquidity Rules

Historically, the regulation and monitoring of bank holding companies and bank liquidity has been addressed as a supervisory matter, without required formulaic measures. The Basel III framework requires bank holding companies and banks to measure their liquidity against specific liquidity tests that, although similar in some respects to liquidity measures historically applied by banks and regulators for management or supervisory purposes, going forward would be required explicitly by regulation. One test from the Basel III framework, referred to as the liquidity coverage ratio (“LCR”), is designed to ensure that a banking entity maintains an adequate level of unencumbered high-quality liquid assets (“HQLA”) equal to the entity’s expected net cash outflow for a 30-day time horizon under a liquidity stress scenario. The other test, referred to as the net stable funding ratio (“NSFR”), is designed to promote more medium- and long-term funding of the assets and activities of banking entities over a one-year time horizon.

In 2014, the federal banking agencies finalized a rule (the “LCR Rule”) that imposes standardized minimum liquidity requirements for large, internationally active banking organizations (those with at least $250 billion in total assets or at least $10 billion in on-balance sheet foreign exposure) as well as modified standardized minimum liquidity requirements for bank holding companies and savings and loan holding companies that have at least $50 billion in total consolidated assets, but are not internationally active banking organizations. In December 2016, the Federal Reserve adopted rules imposing qualitative and quantitative reporting and disclosure requirements for banking organizations subject to liquidity minimums under the LCR Rule.

Because we are a California-chartered, non-member bank without a bank holding company, we are not subject to the LCR Rule. Nevertheless, we maintain on-balance sheet liquidity and a portfolio of HQLA.

The Basel III Capital Rules and the LCR Rule do not address the NSFR requirement called for by the final Basel III framework. In 2014, the Basel Committee published the final NSFR rule for internationally active banking organizations and expected such financial institutions to be subject to the rule by January 1, 2018. The U.S. federal banking agencies have not released a final rule and have not yet determined to what extent they may apply to First Republic since it is not a large, internationally active banking organization and does not have a bank holding company.

Safety and Soundness Standards

Guidelines adopted by the federal banking agencies pursuant to the FDIA establish general safety and soundness standards for depository institutions related to internal controls, loan underwriting and documentation,

and asset growth. Among other things, the FDIA limits the interest rates paid on deposits by undercapitalized institutions, restricts the use of brokered deposits, and limits the aggregate extensions of credit by a depository institution to an executive officer, director, principal shareholder or related interest. These standards have not limited our operations in any material way to date.

The federal banking agencies may require an institution to submit an acceptable compliance plan as well as have the flexibility to pursue other more appropriate or effective courses of action given the specific circumstances and severity of an institution's noncompliance with one or more standards.

The FDIC may terminate deposit insurance upon a finding that the institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC.

Resolution Plans

Under a rule adopted by the FDIC, an insured depository institution with $50 billion or more in total assets, such as First Republic Bank, is required to submit periodically to the FDIC a contingency plan for the resolution of such institution in the event of its failure. The rule requires a covered insured depository institution to submit a resolution plan that should enable the FDIC, as receiver, to resolve the institution under applicable receivership provisions of the FDIA in a manner that ensures that depositors receive access to their insured deposits within one business day of the institution's failure (two business days if the failure occurs on a day other than Friday), maximizes the net present value return from the sale or disposition of its assets and minimizes the amount of any loss to be realized by the institution's creditors. If the FDIC determines that a plan is not credible, the insured depository institution will have 90 days to submit a revised plan that addresses the deficiencies identified by the FDIC and discusses revisions made to address such deficiencies. First Republic Bank submitted its initial resolution plan pursuant to this rule in December 2016, and will periodically revise its plan as required.

Premiums for Deposit Insurance and Assessments

Our deposits are insured by the FDIC to the fullest extent permissible by law, and we are subject to deposit insurance assessments to maintain the DIF. Deposit insurance assessments are based on average total assets, less average tangible equity. For larger institutions, such as First Republic, the FDIC uses a performance score and a loss-severity score to calculate an initial assessment rate. In calculating these scores, the FDIC uses a bank's capital level and supervisory ratings (its CAMELS ratings) and certain financial measures to assess an institution's ability to withstand asset-related stress and funding-related stress. The FDIC has the ability to make discretionary adjustments to the total score based upon significant risk factors that are not adequately captured in the calculations.

The Dodd-Frank Act increased the minimum for the DIF reserve ratio, which is the ratio of the amount in the DIF to insured deposits, from 1.15% to 1.35% and required that the ratio reach 1.35% by September 30, 2020. Insured depository institutions with $10 billion or more in total assets are responsible for funding this increase. The FDIC has set the long-range, minimum target reserve ratio at 2.0%. At least semi-annually, the FDIC will update its loss and income projections for the DIF and, if needed, will increase or decrease assessment rates, following notice-and-comment rulemaking, if required.

In March 2016, the FDIC approved a final rule to impose a surcharge on insured depository institutions with $10 billion or more in total assets in order to reach a DIF reserve ratio of 1.35%. Under the final rule, the surcharge becomes effective when the DIF reserve ratio reaches 1.15% and will continue through the quarter in which the DIF reserve ratio first meets or exceeds 1.35%, but not past the end of 2018. The FDIC will also impose an additional shortfall assessment if the DIF reserve ratio does not reach 1.35% by December 31, 2018. The surcharge became effective in the third quarter of 2016, when the DIF reserve ratio reached 1.15%. The surcharge equals an annual rate of 4.5 basis points applied to an institution's assessment base, less a $10 billion

adjustment to reduce the assessment base. Additionally, lower regular assessment rates are in effect, ranging from a minimum of 3 to a maximum of 30 basis points. The surcharge, partially offset by a lower assessment rate, resulted in an increase in our FDIC assessment expense beginning in the third quarter of 2016. At December 31, 2017, the DIF reserve ratio was 1.30%.

Anti-Money Laundering, the USA Patriot Act and Office of Foreign Assets Control Regulation

A major focus of governmental policy on financial institutions is combating money laundering and terrorist financing. The USA PATRIOT Act of 2001 substantially broadened the scope of United States anti-money laundering laws and regulations by imposing significant new compliance and due diligence obligations, creating new crimes and penalties and expanding the extra-territorial jurisdiction of the United States. Financial institutions are also prohibited from entering into specified financial transactions and account relationships and must use enhanced due diligence procedures in their dealings with certain types of high-risk customers and implement a written customer identification program. Financial institutions must also take certain steps to assist government agencies in detecting and preventing money laundering and to report certain types of suspicious transactions.

In addition, the United States has imposed economic sanctions that affect transactions with designated foreign countries, nationals and others which are administered by the U.S. Treasury Department Office of Foreign Assets Control.

Failure of a financial institution to maintain and implement adequate programs to combat money laundering and terrorist financing and to prohibit transactions with targets of sanctions, or to comply with all of the relevant laws or regulations, could have serious legal and reputational consequences for the institution.

Consumer Financial Protection Bureau Supervision

The CFPB, created by the Dodd-Frank Act, is directed to prevent unfair, deceptive and abusive practices and ensure that all consumers have access to markets for consumer financial products and services, and that such markets are fair, transparent and competitive. The CFPB has authority under the Dodd-Frank Act to enforce and issue rules and regulations implementing existing consumer protection laws and is responsible for all such existing laws and regulations. Depository institutions with assets exceeding $10 billion (such as us), their affiliates, and other "larger participants" in the markets for consumer financial services (as determined by the CFPB) are subject to direct supervision by the CFPB, including any applicable examination, enforcement and reporting requirements the CFPB may establish.

The CFPB has finalized a number of significant rules, which impact nearly every aspect of the lifecycle of a residential mortgage loan. These rules implement the Dodd-Frank Act amendments to the Equal Credit Opportunity Act, the Truth-in-Lending Act ("TILA") and the Real Estate Settlement Procedures Act ("RESPA"). Among other things, the rules adopted by the CFPB require banks to: (i) develop and implement procedures to ensure compliance with a "reasonable ability-to-repay" test (as discussed below); (ii) implement new or revised disclosures, policies and procedures for originating and servicing mortgages, including, but not limited to, pre-loan counseling, early intervention with delinquent borrowers and specific loss mitigation procedures for loans secured by a borrower's principal residence, and mortgage origination disclosures, which integrate existing requirements under TILA and RESPA; (iii) comply with additional restrictions on mortgage loan originator hiring and compensation; and (iv) comply with new disclosure requirements and standards for appraisals and certain financial products.

Banking regulators take into account compliance with consumer protection laws when considering approval of a proposed transaction.

Ability-to-Repay Requirement

The Dodd-Frank Act amended the TILA to require that mortgage lenders show that they have verified the borrower's ability to repay a residential mortgage loan (which does not include HELOCs). Borrowers who bring actions within three years of a violation of the ability-to-repay requirement could be entitled to statutory damages equal to the sum of all financing charges and fees. In addition, a borrower can assert a violation of the ability-to-repay requirement in a foreclosure proceeding as a matter of defense by recoupment or setoff against the lender or any assignee of the lender, without time limit. In January 2013, the CFPB issued a final rule establishing the underwriting practices that are required by the ability-to-repay requirement. The rule further provides that lenders of mortgages that meet a "qualified mortgage" standard, however, may have a safe harbor or a presumption of compliance with the requirement.

Qualified mortgages cannot have negative amortization, interest-only payments, or balloon payments, terms over 30 years, or points and fees over certain thresholds. Qualified mortgages also have underwriting requirements that include verification of income, underwriting based on a fully amortizing payment schedule and the maximum interest rate during the first five years, and a 43% debt-to-income ratio. Lenders of qualified mortgages are granted either a safe harbor or a rebuttable presumption of compliance, depending on whether the qualified mortgage is a "higher priced" mortgage as compared to the average rates for comparable transactions. The final rule also prohibits prepayment penalties for residential mortgage loans, except for qualified mortgages that are not higher priced. The qualifying mortgage rule became effective in January 2014.

Incentive Compensation

Guidelines adopted by the federal banking agencies pursuant to the FDIA prohibit excessive compensation as an unsafe and unsound practice and describe compensation as excessive when the amounts paid are unreasonable or disproportionate to the services performed by an executive officer, employee, director or principal shareholder.

In June 2010, the federal banking agencies issued comprehensive guidance on incentive compensation policies intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. This guidance, which covers all employees who have the ability to materially affect the risk profile of an organization, either individually or as part of a group, is based upon the key principles that a banking organization's incentive compensation arrangements should (i) provide incentives that do not encourage risk-taking beyond the organization's ability to effectively identify and manage risks, (ii) be compatible with effective internal controls and risk management, and (iii) be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. Any deficiencies in compensation practices that are identified may be incorporated into the organization's supervisory ratings, which can affect its ability to make acquisitions or perform other actions. These three principles are incorporated into the proposed joint compensation regulations under the Dodd-Frank Act, discussed below. The guidance provides that enforcement actions may be taken against a banking organization if its incentive compensation arrangements or related risk-management control or governance processes pose a risk to the organization's safety and soundness and the organization is not taking prompt and effective measures to correct the deficiencies.

The Dodd-Frank Act requires the federal banking agencies and the SEC to establish joint regulations or guidelines for specified regulated entities, such as us, having at least $1 billion in total assets, to prohibit incentive-based payment arrangements that encourage inappropriate risk-taking by providing an executive officer, employee, director or principal shareholder with excessive compensation, fees, or benefits or that could lead to material financial loss to the entity. In addition, these regulators must establish regulations or guidelines requiring enhanced disclosure to regulators of incentive-based compensation arrangements. The agencies initially proposed such regulations in April 2011, and in April 2016, proposed a new rule to implement such regulations. Although final rules have not yet been adopted as of February 2018, and if finalized, would not be effective until

the first day of the calendar quarter that begins at least 540 days after publication of the final rule in the Federal Register, if these or other regulations are adopted in a form similar to that proposed, they will impose limitations on the manner in which we may structure compensation for our executives and certain other employees.

The scope and content of the federal banking agencies' policies on incentive compensation are continuing to develop and are likely to continue evolving.

Community Reinvestment Act and Fair Lending

We are subject to certain fair lending requirements and reporting obligations involving home mortgage lending operations. We are also subject to the CRA. The CRA generally requires the federal banking agencies to evaluate the record of a financial institution in meeting the credit needs of its local communities, including low- and moderate- income neighborhoods in a safe and sound manner. In addition to substantive penalties and corrective measures that may be required for a violation of certain fair lending laws, the federal banking agencies may take compliance with such laws and CRA into account when regulating and supervising other activities. Federal regulators are required to provide a written examination report of an institution's CRA performance using a four-tiered descriptive rating system. We received a rating of "Satisfactory" in our most recent CRA examination. These ratings and written examination reports are available to the public.

Fair lending laws prohibit discrimination in the provision of banking services. The enforcement of these laws has been an increasing focus for bank regulators. Fair lending laws include the Equal Credit Opportunity Act (and Regulation B thereunder) and the Fair Housing Act, which outlaw discrimination in credit transactions and residential real estate transactions on the basis of prohibited factors including, among others, race, color, national origin, sex, and religion. A lender may be liable under these laws through administrative enforcement or private civil actions for policies that result in a disparate treatment of, or have a disparate impact on, a protected class of applicants or borrowers. We are required to have a fair lending program that is of sufficient scope to monitor the inherent fair lending risk of the institution and that appropriately remediates issues which are identified.

Permissible Financial Activities

Insured state non-member banks, including us, are permitted to engage through "financial subsidiaries" in certain activities which have been determined by the Federal Reserve to be financial in nature or incidental to financial activity. To engage in such activities, the bank must be well-managed and the bank and its insured depository institution affiliates must each be well-capitalized and have received at least a "Satisfactory" rating in its most recent CRA examination. The bank must also deduct the aggregate amount of its outstanding equity investment in financial subsidiaries, including retained earnings, from the bank's capital and assets for purposes of calculating regulatory capital ratios and must disclose this fact in any published financial statements. Additionally, the bank must comply with Sections 23A and 23B of the Federal Reserve Act, which place quantitative and qualitative limits on transactions with a depository institution's affiliates, including restrictions on extensions of credit to affiliates, and comply with certain financial and operational standards as though the financial subsidiaries were subsidiaries of a national bank.

The Dodd-Frank Act prohibits banks and their affiliates from engaging in proprietary trading and investing in and sponsoring hedge funds and private equity funds. The statutory provision is commonly called the "Volcker Rule." In December 2013, federal regulators adopted final rules to implement the Volcker Rule. Due to our consolidated assets exceeding $50 billion, we have implemented an "enhanced" compliance program as required by the Volcker Rule, but are not required to report quantitative metrics under the Volcker Rule due to the limited size of our trading assets and liabilities.

Financial Privacy

Under federal statutes and FDIC regulations, we are limited in our ability to disclose non-public information about consumers to nonaffiliated third parties. These limitations require disclosure of privacy policies to

consumers and, in some circumstances, allow consumers to prevent disclosure of certain personal information to a nonaffiliated third party. These regulations affect how consumer information is transmitted through diversified financial companies and conveyed to outside vendors.

In connection with the regulations governing the privacy of consumer financial information, the federal banking agencies, including the FDIC, have also adopted guidelines for establishing information security standards and programs to protect such information under the supervision of the board of directors.

Restrictions on Dividends and Other Distributions

The power of the board of directors of an insured depository institution to declare a cash dividend or other distribution with respect to capital is subject to statutory and regulatory restrictions that limit the amount available for such distribution depending upon earnings, financial condition and cash needs of the institution, as well as general business conditions. Insured depository institutions are also prohibited from paying management fees to any controlling persons or, with certain limited exceptions, making capital distributions, including dividends, if after such transaction the institution would be less than adequately capitalized.

Under California law, we may not make a distribution to shareholders that exceeds the lesser of (i) our retained earnings or (ii) our net income for the last three fiscal years, less the amount of any distributions made during that period. With the Commissioner's approval, however, we may make a distribution that does not exceed the greater of (i) our retained earnings, (ii) our net income for our last fiscal year or (iii) our net income for our current fiscal year. The Commissioner may otherwise limit our distributions to shareholders if the Commissioner finds that the shareholders' equity is not adequate or that such distributions would be unsafe or unsound for us.

The federal banking agencies also have authority to prohibit depository institutions from engaging in business practices that are considered unsafe or unsound, possibly including payment of dividends or other payments under certain circumstances even if such payments are not expressly prohibited by statute.

It is anticipated that our capital ratios reflected in the annual stress test will be an important factor considered by the FDIC in evaluating whether proposed payments of dividends or stock repurchases may be an unsafe or unsound practice. For additional discussion of stress testing requirements, refer to "—Annual Capital Stress Tests" above.

Change in Bank Control

Under the Change in Bank Control Act (the "CIBCA"), a notice must be submitted to the FDIC if any person (including a company), or group acting in concert, seeks to acquire "control" of us. Control is defined as the power, directly or indirectly, to direct our management or policies or to vote 25% or more of any class of our outstanding voting securities. Additionally, a rebuttable presumption of control arises when any person (including a company), or group acting in concert, seeks to acquire 10% or more, but less than 25%, of any class of our outstanding voting securities which are publicly traded. When reviewing a notice under the CIBCA, the FDIC will take into consideration the financial and managerial resources of the acquirer, the convenience and needs of the communities served by us, the anti-trust effects of the acquisition and other factors. California law similarly requires prior approval of the Commissioner of any change in control. Under the Bank Holding Company Act of 1956, as amended (the "BHCA"), any company that is not an existing bank holding company would be required to obtain prior approval from the Federal Reserve before it could obtain "control" of us (and thereby become a bank holding company) within the meaning of the BHCA. Control generally is defined to mean the ownership or power to vote 25% or more of any class of our voting securities, the ability to control in any manner the election of a majority of our directors or the ability to exercise a controlling influence over our management and policies. An existing bank holding company would be required to obtain the Federal Reserve's prior approval under the BHCA before acquiring more than 5% of any class of our voting securities.

Other Regulatory Matters

Insured depository institutions of our size must undergo a full-scope, on-site examination by their primary federal banking agency at least once every 12 months. The cost of examinations of insured depository institutions and any affiliates may be assessed by the appropriate federal banking agency against each institution or affiliate, as it deems necessary or appropriate. As a result of our current asset size, our regulators, the FDIC and DBO, now utilize an exam team that remains on site throughout the year, as is consistent with their large bank supervision practices.

Regulations require insured depository institutions to adopt written policies establishing appropriate limits and standards, consistent with such guidelines adopted by the federal banking agencies, for extensions of credit secured by real estate or made for purposes of financing permanent improvements to real estate.

The FDIC has also adopted regulations imposing minimum requirements on us with respect to appraisals obtained in connection with certain real estate related financial transactions. Appraisals by state-certified or state-licensed appraisers are required for all such transactions unless an exemption applies. The more common exceptions relate to smaller transactions and transactions that are not secured by real estate. Appraisals must comply with the FDIC's appraisal standards, and appraisal reports must be issued in writing.

Tax Reform

On December 22, 2017, tax reform legislation (the "Tax Reform Act"), was enacted into law. The Tax Reform Act includes a number of provisions that impact or may have an impact on our business, including the following:

- Reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. As a result, we recorded a one-time revaluation adjustment to our deferred tax assets, with a corresponding increase in provision for income taxes of $39.7 million for 2017. In addition, our tax-equivalent net interest margin will be reduced by 13 to 15 basis points as a result of calculating the tax-equivalent yields on our investments in tax-exempt municipal securities and loans at the reduced tax rate, but our reported interest income, and our efficiency ratio, will not be impacted by the changed tax rate.
- Disallows the federal income tax deduction of FDIC deposit insurance premiums for banking organizations with total consolidated assets of $50 billion or more. As a result, we will no longer be able to deduct our FDIC deposit insurance premiums beginning in 2018.
- Limits mortgage interest, home equity interest and state and property tax deductions for homeowners. These changes will increase the after-tax cost of mortgage and home equity lending to certain home buyers and owners, particularly those with higher incomes, and could reduce demand for residential mortgage or home equity lending or depress housing prices, potentially resulting in unfavorable single family mortgage or home equity lending conditions for us.

For additional discussion of the impact of the Tax Reform Act, refer to "Item 1A. Risk Factors" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Future Legislation

Congress may enact legislation from time to time that affects the regulation of the financial services industry, and state legislatures may enact legislation from time to time affecting the regulation of financial institutions chartered by or operating in those states. Federal and state regulatory agencies also periodically propose and adopt changes to their regulations or change the manner in which existing regulations are applied. The substance or impact of pending or future legislation or regulation, or the application thereof, cannot be predicted, although enactment of the proposed legislation could impact the regulatory structure under which we operate and may significantly increase our costs, impede the efficiency of our internal business processes, require

us to increase our regulatory capital and modify our business strategy, and limit our ability to pursue business opportunities in an efficient manner. Recent political developments, including the change in presidential administrations in the United States, have added additional uncertainty to the implementation, scope and timing of regulatory reforms, including potential deregulation in some areas.

Available Information

We are subject to the information reporting requirements of the Exchange Act, as administered and enforced by the FDIC, and we are subject to FDIC rules promulgated thereunder. Consequently, we file annual, quarterly and current reports, proxy statements and other information with the FDIC, copies of which are made available to the public over the Internet at https://efr.fdic.gov/fcxweb/efr/index.html. You may also inspect and copy any document we file with the FDIC at the public reference facilities maintained at the Federal Deposit Insurance Corporation, Accounting and Securities Disclosure Section, Division of Risk Management Supervision, 550 17th Street, NW, Washington, D.C. 20429.

We make available, free of charge through our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, definitive proxy statements and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after such reports are filed with or furnished to the FDIC. Additionally, we have adopted and posted on our website a code of ethics that applies to our principal executive officer, principal financial officer and principal accounting officer. Within the required time period, we will post on our website any amendment to the code of ethics and any waiver applicable to any executive officer, director or senior financial officer. Our website also includes our corporate governance guidelines and the charters for our audit committee, our compensation committee, and our corporate governance and nominating committee. The address for our website is firstrepublic.com.

You may also request a copy of any of the aforementioned documents at no cost by writing or by telephoning us at the following address or telephone number:

First Republic Bank
111 Pine Street, 2nd Floor
San Francisco, CA 94111
Attention: Investor Relations
(415) 392-1400

Item 1A. Risk Factors.

We are subject to a variety of risks, some of which are specific to us and some of which are inherent to the financial services industry. There are risks, many beyond our control, that could cause our financial condition, liquidity or results of operations to differ materially from management's expectations. This Annual Report on Form 10-K may not describe all of those risks. Some of the risks that may affect us are described below. Any of the risks described below, by itself or together with one or more other factors, may materially and adversely affect our business, results of operations, liquidity or financial condition or the market price or liquidity of our common stock. The risks presented below are not the only risks that we face. Additional risks that we do not presently know or that we currently deem immaterial may also materially and adversely affect our business, results of operations, liquidity or financial condition or the market price or liquidity of our common stock. Further, to the extent that any of the information contained in this Annual Report on Form 10-K constitutes forward-looking statements, the risk factors below also are cautionary statements identifying important factors that could cause actual results to differ materially from those expressed in any such forward-looking statements. *See "Information Regarding Forward-Looking Statements" on page 3.*

Risks Related to Our Business

We face significant competition to attract and retain banking clients.

We operate in the highly competitive banking industry and face significant competition for banking clients from other banks and financial institutions located both within and beyond our principal markets. We compete with commercial banks, savings and loan associations, mortgage companies, insurance companies, credit unions, non-bank financial services companies, money market funds, brokerage firms and other financial institutions operating within or near the areas we serve, particularly service-focused community banking institutions that target the same clients we do. We also face competition for home loans from large, nationwide banks and for deposits from nationwide and regional banks specializing in private banking. Additionally, we compete with companies that solicit loans and deposits in our principal markets or over the Internet.

Many of our non-bank competitors are not subject to the same extensive regulations that govern our activities and may have greater flexibility in competing for business. Many of our competitors are also larger and have significantly more resources, greater name recognition and larger market shares than we do, enabling them to maintain more banking locations, mount extensive promotional and advertising campaigns and be more aggressive than we are in competing for loans and deposits. Certain of our similarly sized competitors may be acquired by larger institutions, thus giving them certain incremental competitive advantages. We expect competition to continue to intensify due to the continuing consolidation of many financial institutions. The financial services industry could become even more competitive as a result of legislative, regulatory and technological changes. Additionally, some of our current commercial banking clients may seek alternative banking sources as they develop needs for credit facilities larger than we may be able to accommodate.

In addition, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally provided by banks, such as automatic transfer and automatic payment systems. In addition, we compete with other alternative lenders, including "marketplace" lenders, peer-to-peer lenders, and other financial technology ("FinTech") lenders. Our ability to compete successfully will depend on a number of factors, including, among other things:

- Our ability to build and maintain long-term client relationships while ensuring safe and sound banking practices;
- The scope, relevance and pricing of products and services offered to meet client needs and demands;
- The regulatory environment for traditional banks as opposed to FinTech lenders;
- Client satisfaction with our products and services; and
- Industry and general economic trends.

Our failure to perform or weakness in any of these areas could significantly and negatively impact our competitive position, which could adversely affect our growth and profitability, which, in turn, could have a material adverse effect on our business, results of operations or financial condition. See “Item 1. Business—Competition.”

The markets in which we operate are subject to the risk of earthquakes and other natural disasters.

A significant number of our properties, and real estate properties currently securing loans made by us and our borrowers in general, are located in California. California has had and will continue to have major earthquakes in many areas, including the San Francisco Bay Area, where a significant portion of the collateral and assets of our borrowers is concentrated, and the Southern California coastal regions. At December 31, 2017, approximately 51% of our loans outstanding were secured by real estate located in California.

California is also prone to brush and forest fires, mudslides and other natural disasters. A number of these properties are not insured against such occurrences. Borrowers are not required to and may not insure for these hazards other than fire damage. In addition to possibly sustaining damage to our premises and disruption of our operations, if there is a major earthquake, flood, fire or other natural disaster in California or elsewhere in our markets, we will face the risk that many of our borrowers may experience uninsured property losses or sustained job interruption or loss that may materially impair their ability to meet the terms of their loan obligations. A major earthquake, flood, drought, fire, pandemic or other natural disaster in our California markets or our other markets could materially and adversely affect our business, results of operations or financial condition.

We are subject to interest rate risk.

Fluctuations in interest rates may negatively impact our banking business. Our primary source of income from operations is net interest income, which is the difference between the interest income received on interest-earning assets (primarily loans and investment securities) and the interest expense incurred on interest-bearing liabilities (usually deposits and borrowings). The level of net interest income is primarily a function of the average balance of interest-earning assets, the average balance of interest-bearing liabilities and the spread between the yield on such assets and the cost of such liabilities during a given period. These factors are influenced by the pricing and mix of both interest-earning assets and interest-bearing liabilities which, in turn, are impacted by external factors such as the local economy, client demand and product preferences, competition for loans and deposits, the monetary policy of the Federal Open Market Committee of the Federal Reserve System (the “FOMC”) and market interest rates. In December 2015, the FOMC began tightening monetary policy and has since increased the Federal Funds rate to a target range of 1.25% to 1.50% in December 2017, and there could be additional interest rate increases in the future.

The rate paid on our deposits and short-term wholesale borrowings is largely based on short-term interest rates, the level of which is driven primarily by the FOMC’s monetary policy actions. However, the yields generated by our loans and securities are typically driven by medium- and longer-term interest rates, which are set by the market and at times, the FOMC’s actions. The level of net interest income is therefore influenced by movements in such interest rates and the pace at which such movements occur. If the interest rates on our interest-bearing liabilities increase faster than the interest rates on our interest-earning assets, our net interest income may decline and with it, a decline in our earnings may occur. As a result, our business, results of operations or financial condition may be adversely affected, perhaps materially.

Furthermore, our securities portfolio includes long-term municipal bonds with fixed interest rates. The yields on these bonds do not increase when interest rates rise. In addition, in a rising rate environment, the prices of such securities would likely decline, which may result in unrealized losses for the Bank. Although most of our long-term municipal bonds are held-to-maturity, we would have to recognize such a loss in earnings, which could be material, were we to sell these securities.

Changes in interest rates can also affect the slope of the yield curve and could also impact the net interest margin. A decline in the current yield curve or a flatter or inverted yield curve could cause our net interest income and net interest margin to contract, which could have a material adverse effect on our net income and cash flows, as well as the value of our assets. Changes in the yield curve may also adversely affect the yield on certain investment securities or loans by increasing prepayment risk.

An increase in interest rates could also have a negative impact on our results of operations by reducing the ability of borrowers to make payments under their current adjustable-rate loan obligations. These circumstances could not only result in increased loan defaults, foreclosures and charge-offs, but also necessitate further increases to the allowance for loan losses, which may materially and adversely affect our business, results of operations or financial condition.

Our operations are concentrated geographically in California, particularly San Francisco, and the Northeastern United States, and poor economic conditions in these areas could adversely affect the demand for our products and our credit quality.

Our operations are located primarily in Northern and Southern California and the New York City and Boston metropolitan areas. Local economic conditions in these areas can have a significant impact on the demand for our products and services, our loans and wealth management business, the ability of borrowers to pay interest on and repay the principal of these loans, and the value of the collateral securing these loans. Adverse changes in economic conditions in these markets may negatively affect our business, results of operations or financial condition. Our loan portfolio, in particular, is concentrated in California in general and the San Francisco Bay Area in particular. As of December 31, 2017, approximately 51% of our loans outstanding were secured by real estate located in California and approximately 33% of our loans outstanding were secured by real estate in and around the San Francisco Bay Area. Declines in values in the California real estate market could have an adverse impact on our borrowers and on the value of the collateral securing many of our loans, which in turn could adversely affect our currently performing loans, leading to future delinquencies or defaults and increases in our provision for loan losses. Furthermore, weak employment trends in our markets could negatively impact our clients' ability to repay their loans.

Our business may be adversely affected by conditions in the financial markets and economic conditions generally.

Our financial performance generally, and in particular, the ability of borrowers to pay interest on and repay the principal of outstanding loans and the value of collateral securing those loans, as well as demand for loans and other products and services we offer and whose success we rely on to drive our future growth, is highly dependent on the business environment in the markets in which we operate and in the United States as a whole. Some elements of the business environment that affect our financial performance include short-term and long-term interest rates, the prevailing yield curve, inflation, monetary supply, fluctuations in the debt and equity capital markets, and the strength of the domestic economy and the local economies in the markets in which we operate. Unfavorable market conditions can result in a deterioration of the credit quality of borrowers, an increase in the number of loan delinquencies, defaults and charge-offs, additional provisions for loan losses, adverse asset values and a reduction in assets under management or administration. The majority of our 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. Loans secured by stock or other collateral may be adversely impacted by a downturn in the economy and other factors that could reduce the recoverability of our investment. Unsecured loans are dependent on the solvency of the borrower, which can deteriorate, leaving us with a risk of loss. Unfavorable or uncertain economic and market conditions can be caused by declines in economic growth, business activity or investor or business confidence, limitations on the availability of or increases in the cost of credit and capital, increases in inflation or interest rates, high unemployment, natural disasters, state or local government insolvency, or a combination of these or other factors. Economic slowdown and instability outside of the United States may adversely affect economic and market conditions in the United States.

Uncertainty about the federal fiscal policymaking process, the medium and long-term fiscal outlook of the federal government, future tax rate changes and employment costs is a concern for businesses, consumers and investors in the United States. Any unfavorable impacts of recently enacted tax reform, unfavorable changes in the general business environment in which we operate, or in the United States as a whole or abroad, could adversely affect our business, results of operations or financial condition.

We face significant competition to attract and retain wealth management clients and may lose current clients due to account performance, changes in investment strategy or other factors.

We face significant competition to attract and retain wealth management clients primarily from commercial banks, trust companies, mutual funds, investment management firms, brokerage firms and other financial services companies. We also compete with private equity firms, hedge funds and other alternative investment firms. Competition is especially keen in our principal markets because numerous well-established and successful investment management firms exist throughout each of the markets in which we operate. In addition, the Bank faces increased competition from firms offering lower-priced investment products and services, including automated portfolio management services. Our ability to successfully attract and retain wealth management clients will depend on, among other things, our ability to compete with our competitors' investment products, level of investment performance, fees, client services, marketing and distribution capabilities. In addition, our ability to retain wealth management clients may be impaired by the fact that investment management contracts are typically non-binding in nature. Most of our clients may withdraw funds from accounts under management at their discretion or close accounts at any time for any reason, including the performance of the investment account, a change in an investment strategy, change in investment advisor or any other reason in their discretion. If we cannot effectively compete to attract and retain clients, our business, results of operations or financial condition may be adversely affected.

The profitability of our wealth management business has been impacted in the past several years as a result of investments in acquiring assets and key personnel and the costs of maintaining a business platform that can support a substantial asset base. Profitability in this area is also a function of the incurrence of legal costs and the management of lower-margin assets, such as sub-advisory, brokerage, money market and custody assets that support our overall client service and relationship model. Further increased costs in our wealth management business could materially and adversely affect our business, results of operations or financial condition.

We must maintain and follow high underwriting standards to grow safely.

Our ability to grow our assets safely depends on maintaining disciplined and prudent underwriting standards and ensuring that our relationship managers and business bankers follow those standards. The weakening of these standards for any reason, such as to seek higher yielding loans, or a lack of discipline or diligence by our employees in underwriting and monitoring loans, may result in loan defaults, foreclosures and additional charge-offs and may necessitate that we significantly increase our allowance for loan losses, each of which could adversely affect our net income. As a result, our business, results of operations or financial condition could be adversely affected.

Our ability to maintain, attract and retain client relationships is highly dependent on our reputation.

Our clients rely on us to deliver superior, highly personalized financial services with the highest standards of ethics, performance, professionalism and compliance. A significant source of new clients has been, and we expect will continue to be, the reputation we maintain and the recommendations of satisfied clients. Damage to our reputation could undermine the confidence of our current and potential clients in our ability to provide financial services. Such damage could also impair the confidence of our counterparties and business partners, and ultimately affect our ability to effect transactions. Maintenance of our reputation depends not only on our success in maintaining our service-focused culture and controlling and mitigating our various risk exposures, including those described in this Annual Report on Form 10-K, but also on our success in identifying and appropriately

addressing issues that may arise in areas such as potential conflicts of interest, anti-money laundering, client personal information, cybersecurity and privacy issues, record-keeping, regulatory investigations and any litigation that may arise from our failure or perceived failure to comply with legal and regulatory requirements.

Maintaining our reputation also depends on our ability to successfully prevent third-parties from infringing on the "First Republic" brand and associated trademarks. Defense of our reputation and our trademarks, including through litigation, could result in costs adversely affecting our business, results of operations or financial condition.

Our wealth management business may be negatively impacted by changes in economic and market conditions, and clients have sought and may continue to seek legal remedies for investment performance.

Our wealth management business may be negatively impacted by changes in general economic and market conditions because the performance of such business is directly affected by conditions in the financial and securities markets.

The financial markets and businesses operating in the securities industry are highly volatile (meaning that performance results can vary greatly within short periods of time) and are directly affected by, among other factors, domestic and foreign economic conditions and general trends in business and finance, all of which are beyond our control. We cannot guarantee that broad market performance will be favorable in the future. Declines in the financial markets or a lack of sustained growth may result in declines in the performance of our wealth management business and the level of assets under management or administration.

The management contracts of our investment management subsidiary generally provide for fees payable for wealth management services based on the market value of assets under management. Because most contracts provide for fees based on market values of securities, fluctuations in securities prices may reduce our wealth management fees and have an adverse effect on our business, results of operations or financial condition.

In addition, following periods of volatile market conditions, wealth management clients may seek legal remedies for investment performance. We may be required to defend against lawsuits involving our broker-dealer and investment management subsidiaries arising from clients' investment losses. These types of lawsuits may result in significant legal expenses or other costs that may not be covered by insurance. We may also face reputational risks with regard to such suits which could impair our ability to effectively compete to attract and retain clients. As a result, any such current or future lawsuits could adversely affect our business, results of operations or financial condition.

Our operations and clients are concentrated in the United States' largest metropolitan areas, which could be the target of terrorist attacks.

The vast majority of our operations and our clients and 88% of the properties securing our real estate loans outstanding are located in the San Francisco Bay Area and the New York City, Los Angeles, and Boston metropolitan areas. These areas have been and may continue to be the target of terrorist attacks. A successful, major terrorist attack in one of these areas could severely disrupt our operations and the ability of our clients to do business with us and cause losses to loans secured by properties in these areas. Such an attack would therefore adversely affect our business, results of operations or financial condition.

Reforms of Fannie Mae and Freddie Mac and the Federal Home Loan Banks could reduce demand for residential mortgage loans, limit our ability to sell residential mortgage loans in the secondary market and affect our funding sources.

The U.S. Congress may consider reforms to the federal government's involvement in the housing market. Reforms could include reducing the scale of Fannie Mae's and Freddie Mac's secondary purchases of residential mortgage loans or winding down these entities entirely. This could significantly reduce the amount of residential mortgage loans that we can sell in the secondary market, which would limit the amount of loans we can originate and in turn limit our ability to create new relationships, manage our growth and earn revenue from loan sales and servicing. Reforms could also include cutting back or eliminating the Federal Home Loan Bank system, which could remove a significant source of term funding for our lending activities and likewise limit our ability to originate loans and manage our interest rate risk. Such reforms could also raise interest rates for residential mortgage loans, thereby reducing demand for our primary lending products, and could have an adverse effect on our business, results of operations or financial condition.

The reduction or elimination of the home mortgage interest income tax deduction could reduce demand for our residential mortgage loans.

Under federal income tax law prior to the Tax Reform Act, homeowners could deduct from their taxable income interest on mortgage loans with a principal amount of up to $1 million secured by first or second homes. Under the Tax Reform Act, beginning in 2018, homeowners who purchased a home on or after December 15, 2017 may deduct interest on mortgage loans with a principal amount of up to $750,000 that are secured only by first homes. The impact of this change will increase the after-tax cost of mortgage loans to certain home buyers and owners, particularly those with higher incomes, and could therefore reduce demand for residential mortgage loans and depress housing prices. The U.S. Congress may consider further reducing the benefit of this deduction, such as by limiting total itemized deductions, allowing deductible expenses to be deducted only at rates less than the highest marginal tax rate, phasing out deductions over specified income thresholds, or eliminating the deduction entirely. Single family mortgage lending constitutes a majority of our lending business. Our most popular mortgage loan product has an initial interest-only period. The reduction in the benefit of the home mortgage interest deduction implemented by the Tax Reform Act and any further reductions to this benefit in the future could materially and adversely affect our business, results of operations or financial condition.

The repeal of federal prohibitions on payment of interest on demand deposits could increase our interest expense.

As of December 31, 2017, we had $25.6 billion of noninterest-bearing business checking accounts and $2.6 billion of interest-bearing business checking accounts. Since July 2011 when the prohibition of depository institutions offering interest-bearing demand deposits was repealed by the Dodd-Frank Act, we have offered interest-bearing corporate checking accounts. If we need to offer higher interest rates on checking accounts to maintain current clients or attract new clients, our interest expense will increase, perhaps materially. Furthermore, if we fail to offer interest in a sufficient amount to keep these demand deposits, our core deposits may be reduced, which would require us to obtain funding in other ways or risk slowing our future asset growth.

Downgrades of the U.S. government's credit rating could have a material adverse effect on our business, financial condition and liquidity.

In August 2011, Standard & Poor's ("S&P") lowered from AAA to AA+ its long-term sovereign credit rating on the United States of America. S&P also lowered its long-term issuer credit rating on the ten Federal Home Loan Banks that had not previously been downgraded and its senior issue ratings on Fannie Mae and Freddie Mac. Prices of U.S. Treasury securities and debt securities issued by Fannie Mae, Freddie Mac and other government-sponsored or government-related entities may be adversely affected by past or future credit rating downgrades. Further, the Federal Home Loan Banks, Fannie Mae and Freddie Mac may face higher costs of

capital that could reduce their lending and secondary mortgage market activities, respectively, or increase the cost of any future advances which we may borrow from the Federal Home Loan Bank of San Francisco. As a member of the Federal Home Loan Bank of San Francisco, we are required to maintain stock ownership at least equal to 2.7% of outstanding advances.

The investments we currently own that may be impacted by such a downgrade totaled $9.8 billion at December 31, 2017, or approximately 11% of our total assets. These investments consisted of $9.5 billion of U.S. Treasury securities, U.S. Government-sponsored agency securities, and mortgage-backed securities ("MBS") issued by government agencies or collateralized by MBS issued by government agencies and $282.2 million of Federal Home Loan Bank stock. See Note 2 in "Item 8. Financial Statements and Supplementary Data" for information on our investment securities. Negative credit rating actions with respect to U.S. government obligations may have unpredictable impacts on financial markets and economic conditions in the United States and abroad, which could in turn have a material adverse effect on our business, results of operations, financial condition or liquidity.

We may not be able to manage our growth successfully.

We seek to grow safely and consistently. Successful and safe growth requires that we follow adequate loan underwriting standards, balance loan, investment portfolio and deposit growth without increasing interest rate risk or compressing our net interest margin, maintain satisfactory regulatory capital at all times, raise capital in advance of growth, scale our operations and systems to support our growth, employ an effective risk management framework and hire and retain qualified employees. If we do not manage our growth successfully, then our business, results of operations or financial condition may be adversely affected. There is no assurance that any new office that we open in connection with our growth will be successful or will otherwise satisfy expectations. In addition, any plans to open new offices may change or become limited.

A small number of our clients control a large portion of our total deposits, and a loss of these clients or deposits more generally could force us to fund our business with more expensive and less stable sources of capital.

Over the past five years, our deposits have increased from $27.1 billion as of December 31, 2012 to $68.9 billion as of December 31, 2017. This growth has been driven by several factors, including many investors' desire for safer, more stable investments, such as insured deposits. In addition, a small number of our clients currently control a significant portion of our total deposits, with approximately 1% of our deposit relationships holding approximately 48% of our total deposits as of December 31, 2017. As of December 31, 2017, the median size of such relationships was $8.2 million, with an average relationship age of 7 years. These client relationships are distributed in our core geographic markets as follows: approximately 49% in California, 28% in New York and 9% in Boston. In addition, these relationships consist of approximately 22% in consumer deposits and 78% in business deposits. Most of these accounts do not have significant restrictions on withdrawal, and these clients can generally withdraw some or all of the funds in their accounts with us upon little or no notice.

We have traditionally obtained funds principally through deposits and borrowings, with the interest rates paid for borrowings generally fixed and medium to long-term in nature, typically exceeding the interest rates paid on deposits. An outflow of deposits because clients seek investments with higher yields or greater financial stability, prefer to do business with our competitors, or for other reasons could force us to rely more heavily on borrowings and other sources of funding to fund our business and meet withdrawal demands, adversely affecting our net interest margin. We may also be forced, as a result of any outflow of deposits, to rely more heavily on equity to fund our business, resulting in greater dilution of our existing shareholders. The current concentration of our total deposits with a small percentage of our clients also implies that the decision by certain of our clients to withdraw some or all of their deposits could result in a significant outflow of deposits and adversely affect our liquidity. Consequently, the occurrence of any of these events could materially and adversely affect our business, results of operations or financial condition.

Our loan portfolio is concentrated in single family residential mortgage loans, including non-conforming, adjustable-rate, initial interest-only period and jumbo mortgages.

As of December 31, 2017, approximately 55% of our loans outstanding are secured by single family residences. As of December 31, 2017, approximately 47% of our residential real estate loans outstanding are hybrid ARMs that will adjust within one to ten years in the future, 40% are adjustable-rate loans and 13% are fixed-rate loans. Any increase in prevailing market interest rates may result in increased payments for borrowers who have ARMs. Also, as of December 31, 2017, approximately 84% of our residential real estate loans outstanding are jumbo loans (over $636,150 in size), and approximately 69% are loans with an initial interest-only period of generally ten years. The inability of borrowers to refinance their loans, particularly while experiencing increases in the monthly payment on their loan amounts, increases the risk that borrowers will become delinquent and ultimately default on their loans and could, consequently, adversely affect our business, results of operations or financial condition. In addition, the secondary market for jumbo mortgages has historically been less liquid compared to conforming loans.

Weakness in the commercial real estate and construction markets could adversely affect our performance.

As of December 31, 2017, commercial real estate loans outstanding represented 10% of our loan portfolio and non-single family construction loans represented 2% of our loan portfolio. The valuation of these loans, and the valuation of the underlying commercial real estate or undeveloped land, is more complicated than the valuation of single family mortgage loans. Commercial real estate loans and loans secured by undeveloped land also tend to have shorter maturities than residential mortgage loans and usually are not fully amortizing, meaning that they may have a significant principal balance or “balloon” payments due on maturity. In addition, commercial real estate properties, particularly industrial and warehouse properties, are generally subject to relatively greater environmental risks than noncommercial properties and to the corresponding burdens and costs of compliance with environmental laws and regulations. Also, there may be costs and delays involved in enforcing rights of a property owner against commercial tenants in default under the terms of their leases. For example, tenants may seek the protection of bankruptcy laws, which could result in termination of lease contracts.

The borrower’s ability to repay a commercial real estate loan depends on leasing to tenants through the life of the loan or the borrower’s successful operation of a business. Weak economic conditions may impair a borrower’s business operations and typically slows the execution of new leases. Such economic conditions may also lead to greater existing lease turnover. Increased vacancies could result in rents falling further over the next several quarters. The combination of these factors could result in further deterioration in the fundamentals underlying the stability of the commercial real estate market and result in the deterioration in value of some of our loans. Any such deterioration could adversely affect the ability of our borrowers to repay the amounts due under their loans. As a result, our business, results of operations or financial condition may be adversely affected.

In the case of construction loans, borrowers face the additional risks that construction may take longer or be more expensive than expected, and that when completed, the value of the property, and therefore rents or sale proceeds, may be less than expected. Any of these circumstances could significantly impair borrowers’ cash flows and their ability to repay the amounts due under their loans, and, as a result, our business, results of operations or financial condition may be adversely affected.

We have increased our lending to businesses, and these loans expose us to greater risk than mortgages.

In the past several years, we have expanded our lending to businesses and have increased the size of individual commercial loans. As of December 31, 2017, business loans and lines of credit outstanding were $8.3 billion, or 13% of total loans outstanding. In addition, the undisbursed commitments for business lines of credit amounted to an additional $8.2 billion. Business loans inherently have more risk of loss than real estate secured loans, in part because business loans may be larger or more complex to underwrite than mortgages, some

of the loans or portions thereof may be unsecured, and the value of any collateral may be severely impacted by the performance of the business. If a decline in economic conditions or other issues cause difficulties for our business borrowers or we fail to evaluate the credit of the loan accurately when we underwrite the loan, it could result in delinquencies or defaults and a material adverse effect on our business, results of operations or financial condition.

We may not be able to sell loans in the secondary market.

We sell a portion of the single family loans that we originate in the secondary market. If secondary mortgage market conditions were to deteriorate in the future and we cannot sell loans at our desired levels, our loan origination volume may be limited. As a result, our ability to create new relationships and manage our growth, as well as our revenue from loan sales and servicing, would be limited, and our business, results of operations or financial condition may be adversely affected.

Our financial results depend on management's selection of accounting methods and certain assumptions and estimates.

Our accounting policies and methods are fundamental to how we record and report our results of operations and financial condition. Our management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with GAAP and reflect management's judgment of the most appropriate manner to report our financial condition and results. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in our reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to presenting our financial condition and results. They require management to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. These accounting policies include the allowance for loan losses and the accounting for income taxes. Because of the uncertainty of estimates involved in these matters, we may be required to do one or more of the following: significantly increase the allowance for loan losses or sustain loan losses that are significantly higher than the reserve provided, or significantly increase our accrued tax liability or decrease the value of deferred tax assets. Any of these could adversely affect our business, results of operations or financial condition.

Changes in accounting standards could materially impact how we report our financial results.

The Financial Accounting Standards Board ("FASB"), the SEC and other bodies that establish and/or interpret accounting standards periodically change the financial accounting and reporting standards that govern the preparation of our consolidated financial statements or may change prior interpretations or positions on how these standards should be applied. These changes may be difficult to predict and may materially affect how we record and report our financial condition and results of operations. In some cases, we could be required to apply a new or revised standard retroactively, which would result in changes to previously reported financial results.

The Bank will adopt new guidance for estimating credit losses on loans receivable, held-to-maturity debt securities, and unfunded loan commitments effective January 1, 2020. The current expected credit losses ("CECL") model is based on lifetime expected losses, rather than incurred losses, and requires the recognition of credit loss expense in the statement of income and a related allowance for credit losses on the balance sheet at the time of origination or purchase of a loan receivable or held-to-maturity debt security. The CECL model requires the use of not only relevant historical experience and current conditions, but also reasonable and supportable forecasts of future events and circumstances, thus incorporating a broad range of information in developing credit loss estimates, which could result in significant changes to both the timing and amount of credit loss expense and allowance. Adoption of this guidance may cause our allowance for loan losses to change materially.

Our allowance for loan losses may be inadequate.

Our management periodically determines the allowance for loan losses based on available information, including the quality of the loan portfolio, the types of loans composing the loan portfolio, economic conditions, the value of the underlying collateral and the level of nonaccrual loans. Increases in this allowance will result in an expense for the period reducing our reported net income. If, as a result of general economic conditions, a decrease in asset quality or growth in the loan portfolio, our management determines that additional increases in the allowance for loan losses are necessary, we may incur additional expenses which will reduce our net income, and our business, results of operations or financial condition may be materially and adversely affected.

Although our management will establish an allowance for loan losses it believes is adequate to absorb probable and reasonable estimable losses in our loan portfolio, this allowance may not be adequate. In particular, if an earthquake or other natural disaster were to occur in one of our principal markets or if economic conditions in those markets were to deteriorate unexpectedly, additional loan losses not incorporated in the then-current allowance for loan losses may occur. Losses in excess of the existing allowance for loan losses would reduce our net income and could adversely affect our business, results of operations or financial condition, perhaps materially.

In addition, federal banking agencies will periodically review our allowance for loan losses and the value attributed to nonaccrual loans or to real estate acquired through foreclosure. Such regulatory agencies may require us to adjust our determination of the amount of allowance for loan losses, nonaccrual loans, troubled debt restructurings or other real estate owned. These adjustments could adversely affect our business, results of operations or financial condition.

The value of our securities in our investment portfolio may decline in the future.

As of December 31, 2017, we owned $2.4 billion of securities available for sale, which had gross unrealized losses of $15.6 million, and $16.2 billion of securities in our held-to-maturity portfolio, which had gross unrealized losses of $178.4 million. We analyze our securities on a quarterly basis to determine if any are subject to an other-than-temporary impairment. The process for determining whether impairment is other-than-temporary usually requires complex, subjective judgments about the future financial performance of the issuer in order to assess the probability of receiving all contractual principal and interest payments on the security. Because of changing economic and market conditions affecting issuers, we may be required to recognize other-than-temporary impairment in future periods, which could adversely affect our business, results of operations or financial condition.

We may not be able to attract and retain key personnel.

Our Chairman and Chief Executive Officer has significant involvement and experience with our operations, having been our founding CEO and having worked with us since First Republic was founded in 1985. As a result, the loss of our Chairman and CEO could have an adverse effect on our business, results of operations or financial condition. Although we have been successful in hiring and promoting experienced professionals on our management team, we need to continue to develop and retain senior management and have the ability to attract qualified individuals to succeed existing key personnel to ensure the continued growth and successful operation of our business. Because we specialize in providing relationship-based banking and wealth management services, we need to continue to attract and retain qualified private banking personnel and wealth managers to expand. Competition for such personnel can be intense, and we may not be able to hire or retain such personnel. The loss of the services of any senior management personnel, relationship managers or wealth managers, or the inability to recruit and retain qualified personnel in the future, including to succeed key personnel, could have an adverse effect on our business, results of operations or financial condition. Additionally, to attract and retain personnel with appropriate skills and knowledge to support our business or succeed key personnel, we may offer a variety of benefits which may reduce our earnings or adversely affect our business, results of operations or financial condition.

We may take actions to maintain client satisfaction that result in losses or reduced earnings.

We may find it necessary to take actions or incur expenses in order to maintain client satisfaction even though we are not required to do so by law. The risk that we will need to take such actions and incur the resulting losses or reductions in earnings is greater in periods when financial markets and the broader economy are performing poorly or are particularly volatile. As a result, such actions may adversely affect our business, results of conditions, or financial condition perhaps materially.

We may be adversely affected by the soundness of other financial institutions.

As a result of trading, clearing or other relationships, we have exposure to many different counterparties and routinely execute transactions with counterparties in the financial services industry, including commercial banks, brokers, dealers and investment banks. Many of these transactions expose us to credit risk in the event of a default by a counterparty. In addition, our credit risk may be exacerbated when the collateral we hold cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the credit or derivative exposure due to us. Any such losses could have a material adverse effect on our business, results of operations or financial condition.

Adverse changes in the ratings for our debt securities or preferred stock could have a material adverse effect on our business, financial condition and liquidity and may increase our funding costs or impair our ability to effectively compete for business and clients.

The major rating agencies regularly evaluate us and their ratings of our long-term debt and preferred stock based on a number of factors, including our financial strength and conditions affecting the financial services industry generally. In general, rating agencies base their ratings on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix and level and quality of earnings, and we may not be able to maintain our current credit ratings and preferred stock ratings. Our ratings remain subject to change at any time, and it is possible that any rating agency will take action to downgrade us in the future.

The ratings for our debt securities and preferred stock impact our ability to obtain funding. Reductions in any of the ratings for our debt securities or preferred stock could adversely affect our ability to borrow funds and raise capital. Downgrades in our ratings could trigger additional collateral or funding obligations, which may adversely impact our liquidity. Therefore, any negative credit rating actions could have a material adverse effect on our business, results of operations, financial condition or liquidity.

Furthermore, our clients and counterparties may be sensitive to the risks posed by a downgrade to our ratings and may terminate their relationships with us, may be less likely to engage in transactions with us, or may only engage in transactions with us at a substantially higher cost. We cannot predict the extent to which client relationships or opportunities for future relationships could be adversely affected due to a downgrade in our ratings. The inability to retain clients or to effectively compete for new business may have a material and adverse effect on our business, results of operations or financial condition.

Additionally, rating agencies themselves have been subject to scrutiny arising from the financial crisis. As a result or for unrelated reasons, the rating agencies may make or may be required to make substantial changes to their ratings policies and practices. Such changes may, among other things, adversely affect the ratings of our securities or other securities in which we have an economic interest.

We may be adversely affected by risks associated with completed and potential acquisitions.

We plan to continue to grow our business organically, although, from time to time, we may consider potential acquisition opportunities that we believe complement our activities and have the ability to enhance our profitability, including acquisitions of wealth management and related businesses. Acquisitions involve numerous risks, including:

- The risk that the acquired business will not perform to our expectations;
- Difficulties, inefficiencies or cost overruns in integrating the personnel, operations, services and products of the acquired business with ours;
- The diversion of management's attention from other aspects of our business;
- Entering geographic and product markets in which we have limited or no direct prior experience;
- The potential loss of key employees; and
- The potential for liabilities and claims arising out of the acquired businesses.

If we were to consider acquisition opportunities, we expect to face significant competition from numerous other financial services institutions, many of which will have greater financial resources than we do. Accordingly, attractive acquisition opportunities may not be available. We may not be successful in identifying or completing any future acquisitions, integrating any acquired business into our operations or realizing any projected cost savings or other benefits associated with any such acquisition.

We must generally satisfy a number of meaningful conditions prior to completing any acquisition, including, in certain cases, federal and state bank and other regulatory approvals. Bank regulators consider a number of factors when determining whether to approve a proposed transaction, including the ratings and compliance history of all institutions involved, the AML and BSA compliance history of all institutions involved, CRA examination results and the effect of the transaction on financial stability. The process for obtaining required regulatory approvals has become substantially more difficult as a result of the financial crisis, which could affect our future business. We may fail to pursue, evaluate or complete strategic and competitively significant business opportunities as a result of our inability, or our perceived inability, to obtain required regulatory approvals in a timely manner or at all.

We could be held responsible for environmental liabilities of properties acquired through foreclosure.

If we are forced to foreclose on a defaulted mortgage loan to recover our investment, we may be subject to environmental liabilities related to the underlying real property. Hazardous substances or wastes, contaminants, pollutants or sources thereof may be discovered on properties during our ownership or after a sale to a third-party. The amount of environmental liability could exceed the value of real property. We could be fully liable for the entire cost of any removal and clean-up on an acquired property. In addition, we may find it difficult or impossible to sell the property before or after any environmental remediation. As a result, our business, results of operations or financial condition may be adversely affected.

Our operations could be interrupted if our third-party service providers experience difficulty, terminate their services or fail to comply with banking regulations.

We depend to a significant extent on a number of relationships with third-party service providers. Specifically, we receive core systems processing, essential web hosting and other Internet systems, deposit processing, wire processing and other processing services from third-party service providers. If these third-party service providers experience difficulties, do not perform the relevant services properly or terminate their services and we are unable to replace them with other service providers, our operations could be interrupted. If an interruption were to continue for a significant period of time, our business, results of operations or financial condition could be adversely affected, perhaps materially. Even if we are able to replace them, it may be at higher cost to us, which could adversely affect our business, results of operations or financial condition.

We face risks related to the ability of our information technology systems to support our existing operations and future growth.

We have developed, and are continuously developing, information technology and other systems and processes to support our business operations. As our business grows, we continue to invest in and enhance these systems and processes. These investments and enhancements could result in changes which, if not implemented effectively, may result in business interruptions, client losses, or damage to our reputation. Any failure in our information technology systems as a result of such changes could have an adverse effect on our business, results of operations or financial condition, perhaps materially.

The network and computer systems on which we depend could fail or experience a security breach.

Our computer systems are vulnerable to unforeseen problems. Because we conduct part of our business over the Internet and outsource several critical functions to third-parties, our operations depend on our ability, as well as that of third-party service providers, to protect computer systems and network infrastructure against damage from fire, power loss, telecommunications failure, physical break-ins or similar catastrophic events. Any damage or failure that causes interruptions in operations could have a material adverse effect on our business, results of operations or financial condition.

We also rely heavily on communications and information systems to conduct our business. Any failure, interruption or breach in security of these systems could result in failures or disruptions in our client relationship management, general ledger, deposit, loan and other systems. While we have policies and procedures designed to prevent or limit the effect of the possible failure, interruption or security breach of our information systems, there can be no assurance that any such failure, interruption or security breach will not occur or, if it does occur, that it will be adequately addressed. The occurrence of any failure, interruption or security breach of our information systems could damage our reputation, result in a loss of client business, subject us to additional regulatory scrutiny, or expose us to civil litigation and possible financial liability, any of which could adversely affect our business, results of operations or financial condition.

We may be adversely affected by disruptions to our network and computer systems or to those of our service providers as a result of denial-of-service or other cyber attacks.

We may experience disruptions or failures in our computer systems and network infrastructure or in those of our service providers as a result of denial-of-service or other cyber attacks in the future. In recent years, federal and state regulators, including the FDIC, have made statements concerning cybersecurity risk management, preparedness and resiliency for financial institutions such as us. These statements range from issues with respect to client account protections to business continuity, and represent the regulators' expectations for financial institutions to have more robust cybersecurity risk management, preparedness and resiliency programs for themselves and their service providers. A financial institution is also expected to develop processes to enable recovery of data and business operations and address rebuilding network capabilities and restoring data if the institution, or its critical service providers, fall victim to this type of cyber attack. We have developed and continue to invest in, systems and processes that are designed to detect, prevent and minimize the impact of security breaches and cyber attacks. Due to the increasing sophistication of such attacks, we may not be able to prevent denial-of-service or other cyber attacks that could compromise our normal business operations or the normal business operations of our clients, or result in the unauthorized use of clients' confidential and proprietary information. The occurrence of any failure, interruption or security breach of network and computer systems resulting from denial-of-service or other cyber attacks could damage our reputation, result in a loss of client business, subject us to additional regulatory scrutiny, or expose us to civil litigation and possible financial liability, any of which could adversely affect our business, results of operations or financial condition.

Our internal control systems could fail to detect certain events.

We are subject to certain operational risks, including, but not limited to, data processing system failures and errors and client or employee fraud. We maintain a system of internal controls designed to prevent, detect and mitigate against such occurrences and maintain insurance coverage for such risks. However, should such an event occur that is not prevented or detected by our internal controls, or is uninsured or in excess of applicable insurance limits, such an event could have a significant adverse effect on our business, results of operations or financial condition.

We rely on the accuracy and completeness of information about our clients and counterparties.

In deciding whether to extend credit or enter into other transactions with clients and counterparties, we may rely on information furnished by or on behalf of clients and counterparties, including financial statements and other financial information. We may also rely on representations of clients and counterparties as to the accuracy and completeness of that information and, with respect to financial statements, on reports of independent auditors. If this information is inaccurate or incomplete, we may be subject to loan losses, regulatory action, reputational harm or other adverse effects on the operation of our business, results of operations or financial condition.

The value of our goodwill and other intangible assets may decline in the future.

As of December 31, 2017, we had $356.4 million of goodwill and other intangible assets, including MSRs. A significant decline in our expected future cash flows, a significant adverse change in the business climate, slower growth rates, a significant and sustained decline in the price of our common stock or the poor performance of an acquired business may require us to take charges in the future related to the impairment of our goodwill and other intangible assets. An increase in the rate at which our borrowers prepay their loans could result in a decline in the value of our MSRs, resulting in a charge for the impairment of those rights. The loss of several of our relationship managers to a competitor may also result in a charge against our goodwill and other intangible assets. If we were to conclude that a future write-down of our goodwill and other intangible assets is necessary, we would record the appropriate charge, which could have a material adverse effect on our business, results of operations or financial condition.

We are subject to liquidity risk.

We require liquidity to meet our deposit and debt obligations as they come due. 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. Factors that could detrimentally impact our access to liquidity sources include a downturn in the geographic markets in which our loans are concentrated, difficult credit markets or adverse regulatory actions against us. Our access to deposits may also be affected by the liquidity needs of our depositors. In particular, a majority of our liabilities on average during 2017 were checking accounts, money market checking and savings deposits, which are payable on demand or upon several days' notice, while by comparison, a substantial majority of our assets were loans, which cannot be called or sold in the same time frame. Although we have been able to replace maturing deposits and advances historically as necessary, we might not be able to replace such funds in the future, especially if a large number of our depositors or those depositors with a high concentration of deposits sought to withdraw their accounts, regardless of the reason. A failure to maintain adequate liquidity could materially and adversely affect our business, results of operations or financial condition.

We are subject to legal and litigation risk.

Because the Bank is extensively regulated by a variety of federal and state agencies, and because we are subject to a wide range of business, consumer and employment laws and regulations at the federal, state and local levels, we are at risk of governmental investigations and lawsuits as well as claims and litigation from private parties. We are from time to time involved in disputes with and claims from clients, government agencies, vendors, employees and other business parties, and such disputes and claims may result in litigation or settlements. Such litigation, alone or in the aggregate, may have an adverse impact on the Bank's operating flexibility, employee relations, financial condition or results of operations as a result of the costs of any judgment, the terms of any settlement and/or the expenses incurred in defending the applicable claim.

We may take filing positions or follow tax strategies that may be subject to challenge.

The amount of income taxes that we are required to pay on our earnings is based on federal and state legislation and regulations. We provide for current and deferred taxes in our financial statements based on our results of operations, business activity, legal structure and interpretation of tax statutes. We may take filing positions or follow tax strategies that are subject to audit and may be subject to challenge. Our net income may be reduced if a federal, state or local authority assessed charges for taxes that have not been provided for in our consolidated financial statements. Taxing authorities could change applicable tax laws, challenge filing positions or assess taxes and interest charges. If taxing authorities take any of these actions, our business, results of operations or financial condition could be adversely affected, perhaps materially.

The impact of recent U.S. tax reform is uncertain.

As of December 31, 2017, the Bank had deferred tax assets of $237.7 million, and the Bank's effective tax rate for 2017 was 16.9%. The Tax Reform Act provides for significant changes, including to the taxation of business entities, allowable business expense deductions, limitations to mortgage interest, home equity interest and state and property tax deductions. Most changes are effective starting in 2018, and the overall impact of these changes on the Bank is uncertain due to, among other things, future guidance that may be issued by tax authorities and changes in interpretations and assumptions by the Bank. The short- and long-term impact of the Tax Reform Act on the economic conditions in the markets in which we operate, and in the United States as a whole, is also uncertain, and any unfavorable change in the general business environment in which we operate could adversely affect our business, results of operation or financial condition.

Risks Related to the Regulatory Oversight of Our Institution

The banking industry is highly regulated, and legislative or regulatory actions taken now or in the future may have a significant adverse effect on our operations.

The banking industry is extensively regulated and supervised under both federal and state laws and regulations that are intended primarily to protect depositors, the public, the DIF, and the banking and financial systems as a whole, not our shareholders. We are subject to the regulation and supervision of the FDIC, the DBO and the CFPB. The banking laws, regulations and policies applicable to us govern matters ranging from the regulation of certain debt obligations, changes in the control of us and the maintenance of adequate capital to the general business operations conducted by us, including permissible types, amounts and terms of loans and investments, the amount of reserves held against deposits, restrictions on dividends, establishment of new offices and the maximum interest rate that may be charged by law. In addition, certain of our subsidiaries are subject to regulation, supervision and examination by other regulatory authorities, including the SEC and FINRA. See "Item 1. Business—Supervision and Regulation" above for more information on the laws and regulations applicable to us.

Since the financial crisis, financial institutions generally have been subjected to increased scrutiny from regulatory authorities. In addition, changes to the legal and regulatory framework governing our operations, including the passage and continued implementation of the Dodd-Frank Act, have significantly revised, and in many cases expanded, the laws and regulations under which we operate. These developments have and may

continue to result in increased costs of doing business, decreased revenues and net income, and may reduce our ability to effectively compete to attract or retain clients. In particular, federal banking agencies have increased their focus on compliance with consumer protection laws and BSA and AML regulations, and we expect this focus to continue. We continue to enhance our compliance programs. These enhancements, as well as any enhancements in other compliance areas that may be required in the future, will result in incremental professional fees and personnel costs, may limit our ability to offer competitive products to our clients and may divert resources from our ongoing business development activities. Notwithstanding our enhancements to these compliance programs, regulators may impose additional requirements on us or require us to take additional actions which could increase our costs, decrease our revenues or net income and reduce or restrict our ability to expand and effectively compete.

We are subject to changes in federal and state banking statutes, regulations and governmental policies, and the interpretation or implementation of them. Regulations affecting banks and other financial institutions in particular undergo continuous review and frequently change and the ultimate effect of such changes cannot be predicted. Regulations and laws may be modified at any time, and new legislation may be enacted that will affect us or our subsidiaries. Any changes in federal and state laws, as well as regulations and governmental policies, could affect us in substantial and unpredictable ways, including ways that may adversely affect our business, results of operations or financial condition.

In addition, federal and state banking regulators have broad authority to supervise our banking business and that of our subsidiaries, including the authority to prohibit activities that represent unsafe or unsound banking practices or constitute violations of statute, rule, regulation, or administrative order. Failure to appropriately comply with any such laws, regulations or regulatory policies, including the consumer protection laws and BSA and AML regulations discussed above, could result in sanctions by regulatory agencies, civil money penalties or damage to our reputation, all of which could adversely affect our business, results of operations or financial condition.

In an Executive Order signed on February 3, 2017, the President of the United States directed the Secretary of the Treasury, in consultation with federal financial regulators, to assess the rules promulgated under the Dodd-Frank Act since 2010 with a view to producing a plan to revise them as necessary. In response to this Executive Order, on June 12, 2017, October 6, 2017 and October 26, 2017, the U.S. Department of Treasury issued the first three of four reports recommending various changes to the regulation of the U.S. financial system, including regulation of U.S. depositary institutions, the U.S. capital markets and the asset management industry. In 2017, Congress also introduced legislation that would substantially restructure various post-financial crisis regulatory requirements, including amendments to the Dodd-Frank Act. It is unknown at this time to what extent new legislation will be passed into law, what pending or new regulatory proposals will be adopted, or if existing legislation or regulations will be repealed. It is also unknown what the effect of such passage, adoption or repeal would have, either positively or negatively, on our industry or on us. If legislation or regulations are implemented or repealed, it may be time-consuming and expensive for us to alter our internal operations in order to comply with such changes.

The Dodd-Frank Act may have a significant adverse effect on our operations.

The Dodd-Frank Act, which was enacted in 2010, contains numerous provisions that affect all banks and bank holding companies. Some of these provisions may result in an increase in our expenses, a decrease in our revenues and changes in the activities in which we choose to engage.

Among other things, the Dodd-Frank Act created a new, independent federal agency, the CFPB, which was granted broad rulemaking, supervisory and enforcement powers under various federal consumer financial protection laws. The CFPB also has examination and primary enforcement authority with respect to depository institutions with $10 billion or more in assets, their service providers and certain non-depository entities such as debt collectors and consumer reporting agencies. Since its formation, the CFPB has finalized a number of significant rules that could have a significant impact on our business and the financial services industry more

generally. Depending on the CFPB's areas of supervisory and future rulemaking focus, it could have an adverse impact on our business, increase our compliance costs and potentially delay our response to marketplace changes. This could result in requirements to alter our products and services that would make our products less attractive to consumers and impair our ability to offer them profitably. The impact this new regulatory regime will have on our business is uncertain at this time.

We have invested and may continue to invest significant management attention and resources to make any necessary changes related to the Dodd-Frank Act and any regulations promulgated thereunder, which may adversely affect our business, results of operations or financial condition. In addition, it is unknown at this time the extent of changes that will be made to the Dodd-Frank Act and related regulations, if any, as a result of the February 2017 Executive Order directing the Secretary of the Treasury, in consultation with federal financial regulators, to assess the rules promulgated under the Act and produce plans to revise them as necessary. We cannot predict the specific impact and long-term effects the Dodd-Frank Act and the regulations promulgated thereunder or any revisions thereto will have on our financial performance, the markets in which we operate and the financial industry more generally.

Legislative and regulatory actions affecting us and the financial services industry, such as the Dodd-Frank Act, may result in increased compliance costs.

As a result of the current regulatory environment and our growth in recent years, we have made and expect to continue to make substantial investments in our regulatory, audit and compliance infrastructure. As a result of the foregoing, our expenses associated with our regulatory, audit and compliance infrastructure have increased. Our expenses could also be higher than anticipated in the future, which may adversely impact our results of operations.

The proposed regulation of incentive compensation under the Dodd-Frank Act may adversely affect our ability to retain our key employees.

Federal regulators have published guidance and proposed regulations which would limit the manner and amount of compensation that banking organizations provide to employees. These regulations and guidance may adversely affect our ability to attract and retain our key employees. If we were to experience such effects with respect to our employees, our business, results of operations or financial condition could be adversely affected.

The ability-to-repay requirement for residential mortgage loans may limit our ability to sell or securitize certain of our mortgage loans and give borrowers potential claims against us.

The Dodd-Frank Act amended the TILA to require that mortgage lenders show that they have verified the borrower's ability to repay a residential mortgage loan (which does not include HELOCs). Borrowers could possibly claim statutory damages against us for violations of this requirement. Lenders of mortgages that meet a "qualified mortgage" standard have a safe harbor or a presumption of compliance with the requirement. Under final rules issued by the CFPB, qualified mortgages cannot have negative amortization, interest-only payments, or balloon payments, terms over 30 years, or points and fees over certain thresholds.

Currently, a majority of the non-conforming mortgage loans that we originate generally have an initial interest-only period of ten years, subsequent to which these loans fully and evenly amortize over a period of generally twenty years. Such loans are not "qualified mortgages" under the standard. If institutional mortgage investors limit their mortgage purchases to "qualified mortgages," demand for our non-qualifying mortgages in the secondary market may be significantly limited in the future. We do not currently intend to discontinue originating interest-only, non-qualifying mortgages, and we may be liable to borrowers under non-qualifying mortgages for violations of the ability-to-repay requirement. Moreover, we do not yet know how the qualifying mortgage requirements will impact the secondary market for sales or securitizations of such mortgage loans. Demand for our non-qualifying mortgages in the secondary market may therefore decline significantly in the future, which would limit the amount of loans we can originate and in turn limit our ability to create new relationships, manage our growth and earn revenue from loan sales and servicing, all of which could materially and adversely affect our business, results of operations or financial condition.

Increases in FDIC insurance premiums may adversely affect our earnings.

Our deposits are insured by the FDIC up to legal limits and, accordingly, we are subject to FDIC deposit insurance assessments. We generally cannot control the amount of premiums we will be required to pay for FDIC insurance. The FDIC increased the DIF's target reserve ratio to 2.0% of insured deposits following the Dodd-Frank Act's elimination of the 1.5% cap on the DIF's reserve ratio. The Dodd-Frank Act also increased the minimum for the DIF reserve ratio, the ratio of the amount in the DIF to insured deposits, from 1.15% to 1.35% and required that the ratio reach 1.35% by September 30, 2020. Insured depository institutions with $10 billion or more in total assets are responsible for funding this increase. The FDIC also imposes a surcharge on insured depository institutions with $10 billion or more in total assets in order to reach a DIF reserve ratio of 1.35%. The surcharge became effective in the third quarter of 2016 when the DIF ratio reached 1.15%, and equals an annual rate of 4.5 basis points applied to an institution's assessment base, less a $10 billion adjustment to reduce the assessment base. Additionally, lower regular assessment rates are in effect, ranging from a minimum of 3 to a maximum of 30 basis points. See "Item 1. Business—Supervision and Regulation—Premiums for Deposit Insurance and Assessments" for additional information. Additional increases in our assessment rate may be required in the future to achieve the targeted reserve ratio or to address the impact of future financial institution failures. In addition, as a result of the Tax Reform Act, beginning in 2018, FDIC insurance premiums will no longer be deductible for federal income tax purposes, which will increase the Bank's provision for income taxes. Future increases of FDIC insurance premiums or special assessments, including increases as a result of any future rulemaking, may adversely affect our business, results of operations or financial condition.

We are subject to more stringent capital requirements.

We are subject to regulatory requirements specifying minimum amounts and types of capital that we must maintain. From time to time, the regulators change these regulatory capital adequacy guidelines. If we fail to meet these minimum capital guidelines and other regulatory requirements, we or our subsidiaries may be restricted in the types of activities we may conduct and we may be prohibited from taking certain capital actions, such as paying dividends and repurchasing or redeeming capital securities.

In particular, the capital requirements now applicable to us under the Basel III Capital Rules are more stringent than previous requirements and additional requirements will be phased in. As these rules take full effect, we will be required to satisfy additional, more stringent, capital adequacy standards than we have in the past. Additionally, stress testing requirements may have the effect of requiring us to comply with even more stringent capital requirements. While we meet the requirements of the Basel III Capital Rules, inclusive of the capital conservation buffer, as phased in by the FDIC, we may fail to do so in the future. In addition, these requirements could have a negative impact on our ability to lend, grow deposit balances, make acquisitions or make capital distributions in the form of increased dividends or share repurchases. Higher capital levels could also lower our return on equity.

We may become subject to more stringent liquidity requirements.

On September 3, 2014, the federal banking agencies finalized the LCR Rule, which imposes standardized minimum liquidity requirements for large, internationally active banking organizations (those with at least $250 billion in total assets or at least $10 billion in on-balance sheet foreign exposure) as well as modified standardized minimum liquidity requirements for bank holding companies and savings and loan holding companies that have at least $50 billion in total assets but are not internationally active banking organizations.

Because we are a California-chartered, non-member bank without a bank holding company, we are not subject to the LCR Rule, despite having greater than $50 billion in total assets. Nevertheless, we maintain on-balance sheet liquidity and a portfolio of HQLA.

It is possible that we may become subject to an LCR requirement or other heightened liquidity requirements in the future if the FDIC or the federal banking agencies apply such a requirement to us as a supervisory matter. In addition, we may become subject to any rule implementing the NSFR that is promulgated in the future. As a result, we could be required to increase our holdings of HQLA or other liquidity resources, such as Federal Reserve balances and U.S. Treasury securities, and increase the use of long-term debt as a funding source.

Increasing our holdings of lower-yielding assets and our use of higher-cost liabilities would reduce our net interest income and could limit our loan and deposit growth and our ability to attract and retain new clients, all of which could adversely affect our business, results of operations and financial conditions.

The investment management business is highly regulated.

The investment management business is highly regulated, primarily at the federal level. One of our subsidiaries, FRIM, is a registered investment advisor under the Investment Advisers Act of 1940, as amended ("Investment Advisers Act"), and FRSC is a registered broker-dealer regulated by the SEC and FINRA. FRIM is subject to fiduciary laws. The Investment Advisers Act imposes numerous obligations on registered investment advisors, including fiduciary, record-keeping, operational and disclosure obligations.

FRIM is also subject to the provisions and regulations of the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA") to the extent they act as a "fiduciary" under ERISA with respect to certain of its clients. ERISA and the applicable provisions of the federal tax laws impose a number of duties on persons who are fiduciaries under ERISA and prohibit transactions involving the assets of each ERISA plan that is a client, as well as certain transactions by the fiduciaries (and certain other related parties) to such plans.

In April 2016, the U.S. Department of Labor adopted a final regulation defining the circumstances in which a person will be treated as a fiduciary under both the ERISA and Section 4975 of the Internal Revenue Code by reason of providing investment advice to retirement plans and individual retirement accounts. As part of this rule, the Department of Labor also adopted new prohibited transaction class exemptions intended to minimize the industry disruptions resulting from the final rules, most notably, the so-called "Best Interest Contract Exemption" and the "Principal Transaction Exemption." On February 3, 2017, the President of the United States issued a memorandum requiring the Department of Labor to examine whether the final rule may adversely impact the ability of Americans to gain access to retirement information and financial advice and to prepare an updated economic and legal analysis of the likely impact of the final rule. In April 2017, the U.S. Department of Labor deferred the effective date of the rules until June 9, 2017, with a transition period permitting an alternative method of compliance for certain exemptions until July 1, 2019. The impact of these final regulations is uncertain and difficult to predict, and, could have varying implications for our business, including, among other things, the products and services that we are able to provide to our clients, and the final regulation could result in increases in compliance and other costs.

Our failure or the failure of our subsidiaries that provide investment management services or any related regulated services to comply with applicable laws or regulations could result in fines, suspensions of individual employees, or other sanctions, including revocation of such subsidiary's registration as an investment advisor or otherwise. Any such failure could have an adverse effect on our reputation and could adversely affect our business, results of operations or financial condition.

Risks Related to Our Common Stock

Shares of our common stock are not an insured deposit.

Shares of our common stock are not bank deposits and are not insured or guaranteed by the FDIC or any other government agency. An investment in our common stock has risks, and you may lose your entire investment.

The market price and trading volume of our common stock may be volatile, which could result in rapid and substantial losses for our shareholders.

The market price of our common stock may be highly volatile and could be subject to wide fluctuations. In addition, the trading volume of our common stock may fluctuate and cause significant price variations to occur. If the market price of our common stock declines significantly, you may be unable to resell your shares of common stock at or above your purchase price, if at all. The market price of our common stock could fluctuate or decline significantly in the future. Some, but certainly not all, of the factors that could negatively affect the price of our common stock, or result in fluctuations in the price or trading volume of our common stock, include:

- Variations in our quarterly operating results or failure to meet the market's earnings expectations;
- Publication of research reports about us or the financial services industry in general;
- The failure of securities analysts to continue coverage of our common stock;
- Additions to or departures of our key personnel;
- Adverse market reactions to any indebtedness we may incur or securities we may issue in the future;
- Actions by our shareholders;
- The operating and securities price performance of companies that investors consider to be comparable to us;
- Changes or proposed changes in laws or regulations affecting our business; and
- Actual or potential litigation and governmental investigations.

In addition, if the market for stocks in our industry, or the stock market in general, experiences a loss of investor confidence, the trading price of the common stock could decline for reasons unrelated to our business, or results of operations or financial condition. If any of the foregoing occurs, it could cause our stock price to fall and may expose us to lawsuits that, even if unsuccessful, could be costly to defend and a distraction to management.

Securities analysts may not continue coverage of our common stock.

The trading market for our common stock will depend in part on the research and reports that securities analysts publish about us and our business. We do not have any control over these securities analysts, and they may cease to cover our common stock. If securities analysts do not cover our common stock, the lack of research coverage may adversely affect its market price. If we are covered by securities analysts, and our common stock is the subject of an unfavorable report, the price of our common stock may decline. If one or more of these analysts cease to cover us or fail to publish regular reports on us, we could lose visibility in the financial markets, which could cause the price or trading volume of our common stock to decline.

We may not continue to pay dividends on our common stock.

Holders of our common stock are only entitled to receive such dividends as our Board of Directors may declare out of funds legally available for payment. We are not required to pay dividends on our common stock and may reduce or eliminate dividends on our common stock at any time in the future. This could adversely affect the market price of our common stock. Dividends on our common stock are also subject to bank regulatory limits and possible approval requirements. In addition, we cannot declare or pay dividends on our common stock or redeem or repurchase our common stock for any period for which we have not declared and paid in full dividends on our preferred stock. Further, under the Dodd-Frank Act, we are required to conduct annual stress tests, and if the results of those stress tests are not satisfactory to the FDIC, we could be required to reduce or eliminate our dividends. Our Board of Directors will continue to evaluate the payment of dividends based on our results of operations, financial condition, capital requirements, regulatory and contractual restrictions, our business strategy and other factors our Board of Directors deems relevant.

Future sales of our common stock may adversely affect our stock price.

The market price of our common stock may be adversely affected by the sale of a significant quantity of our outstanding common stock (including any securities convertible into or exercisable or exchangeable for common stock), or the perception that such a sale could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to raise additional capital by selling equity securities in the future at a time and price that we deem appropriate.

Future issuances of equity securities could adversely affect our stock price.

We have historically approached the capital markets opportunistically, making public offerings of our common stock and preferred stock, from time to time. To the extent practicable, we expect to continue this approach. In addition, we may issue debt securities convertible into or exercisable or exchangeable for equity securities. In each case, we access the capital markets to raise additional capital, support growth or to make acquisitions. Further, we expect to issue stock options or other stock awards to retain and motivate our employees, executives and directors. These issuances of securities could dilute the voting and economic interests of our existing shareholders. These issuances or the perception that such issuances may occur could also adversely affect the market price of our common stock.

Our common stock is subordinate to our existing and future indebtedness and preferred stock.

Shares of our common stock are equity interests and do not constitute indebtedness. As such, our common stock ranks junior to all our deposits and indebtedness, and other non-equity claims on us, with respect to assets available to satisfy claims. Additionally, holders of common stock are subject to the prior dividend and liquidation rights of the holders of our Series D, Series E, Series F, Series G and Series H Preferred Stock (or holders of any interests therein) and any other series of preferred stock we may issue.

Various factors could make a takeover attempt of us more difficult to achieve.

Certain provisions of our organizational documents, in addition to certain federal banking laws and regulations, could make it more difficult for a third-party to acquire us without the consent of our Board of Directors, even if doing so were perceived to be beneficial to our shareholders. These provisions also make it more difficult to remove our current Board of Directors or management or to appoint new directors, and also regulate the timing and content of shareholder proposals and nominations, and qualification for service on our Board of Directors. These provisions could effectively inhibit a non-negotiated merger or other business combination, which could adversely impact the value of our common stock.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

Our management believes that our current and planned facilities are adequate for our current level of operations. Our principal executive offices are at 111 Pine Street, 2nd Floor, San Francisco, California 94111. As of December 31, 2017, we provided our services through 70 Preferred Banking Offices primarily in the following areas: San Francisco, Palo Alto, Los Angeles, Santa Barbara, Newport Beach and San Diego, California; Portland, Oregon; Boston, Massachusetts; Palm Beach, Florida; Greenwich, Connecticut; and New York, New York. We have 6 additional offices that offer exclusively lending, wealth management or trust services. We lease properties that have lease terms expiring at dates ranging from 2018 to 2032, with most leases containing options to extend beyond these dates. In addition to the properties we lease, we also own two properties, consisting of an existing Preferred Banking Office and another Preferred Banking Office scheduled to open in 2018.

Item 3. 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 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The Bank's common stock is listed on the New York Stock Exchange under the symbol "FRC." The following table shows the high and low intraday sales price per share of common stock:

	Share Prices	
	Low	High
2017		
Quarter Ended:		
December 31	$ 86.26	$ 105.52
September 30	$ 91.98	$ 104.99
June 30	$ 88.21	$ 103.69
March 31	$ 88.04	$ 97.43
2016		
Quarter Ended:		
December 31	$ 72.40	$ 92.35
September 30	$ 65.99	$ 78.55
June 30	$ 63.97	$ 73.22
March 31	$ 56.32	$ 68.41

As of February 9, 2018, there were less than 50 shareholders of record, although the Bank believes that its shares are held beneficially by approximately 145,000 shareholders.

Common Stock Dividends

The following table presents cash dividends per share of our common stock declared and paid by the Bank for the periods indicated:

	2017	2016
Quarter Ended:		
December 31	$ 0.17	$ 0.16
September 30	$ 0.17	$ 0.16
June 30	$ 0.17	$ 0.16
March 31	$ 0.16	$ 0.15

We paid a cash dividend for the fourth quarter of 2017 of $0.17 per share of common stock on February 8, 2018 to shareholders of record as of January 25, 2018.

For information on dividend restrictions, refer to "Item 1. Business—Supervision and Regulation—Restrictions on Dividends and Other Distributions" and "Item 1A. Risk Factors—Risks Related to Our Common Stock—We may not continue to pay dividends on our common stock."

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2017, regarding common stock of First Republic Bank to be issued upon exercise of outstanding stock options or pursuant to outstanding restricted stock units or performance share units, and common stock of First Republic Bank remaining available for issuance under the 2017 Omnibus Award Plan and the Employee Stock Purchase Plan:

Plan Category	Number of Shares to Be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in First Column)
Equity compensation plans approved by security holders	5,469,015 [(1)]	$15.42 [(2)]	5,496,889 [(3)]
Equity compensation plans not approved by security holders	—	—	—
Total	5,469,015	$15.42	5,496,889

(1) Includes 2,386,352 outstanding stock options, 2,343,913 outstanding restricted stock units and 738,750 outstanding performance share units.

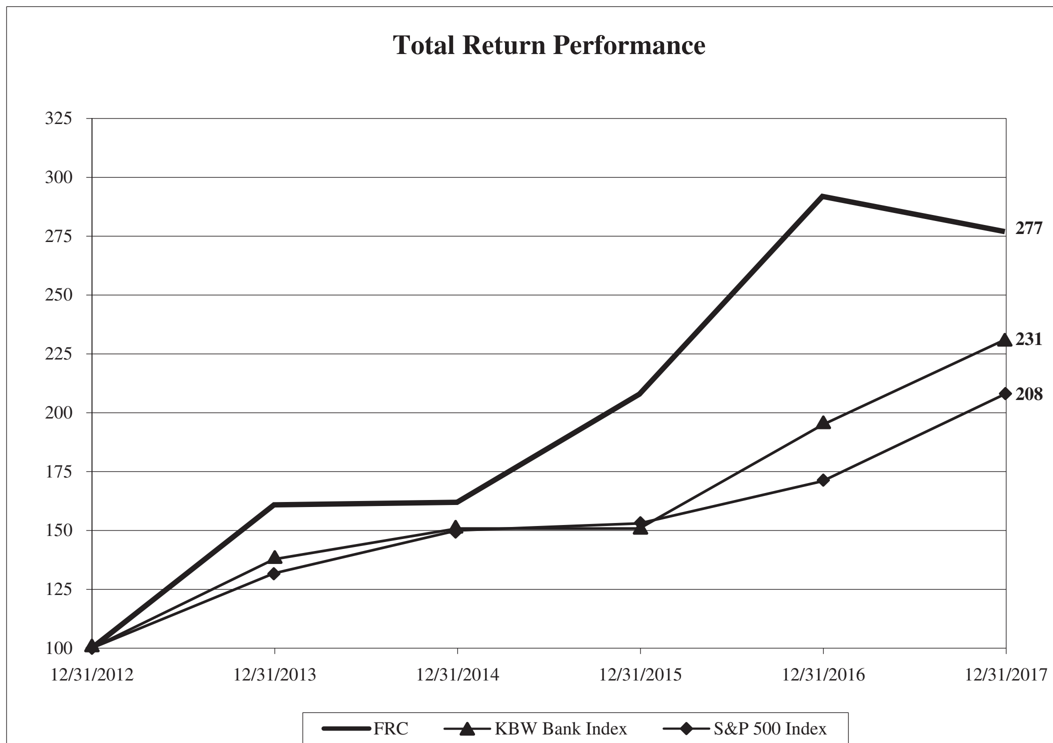
(2) Represents the weighted average exercise price of outstanding stock options. Does not include outstanding restricted stock units or performance share units which do not have an exercise price.

(3) The number of shares remaining available for future issuance consists of 1,386,429 shares reserved for future purchase under the Bank's Employee Stock Purchase Plan and 4,110,460 shares reserved for future awards under our current stock award plan, the Bank's 2017 Omnibus Award Plan, which, effective May 9, 2017, replaced our previous plan, the 2010 Omnibus Award Plan.

See Note 16 in "Item 8. Financial Statements and Supplementary Data" for information on our 2017 Omnibus Award Plan and Employee Stock Purchase Plan.

Performance Graph

The following graph compares, for the period from December 31, 2012 through December 31, 2017, the cumulative shareholder return (change in the stock price plus reinvested dividends) and the total compounded annual growth rate ("CAGR") for the common stock of First Republic Bank with the cumulative return and the CAGR for the (i) KBW Bank Index and (ii) Standard and Poor's 500 ("S&P 500") Index. The performance reflected below assumes that $100 was invested in our common stock and each of the indices listed below at their closing prices on December 31, 2012. The performance of our common stock reflected below is not indicative of our future performance.



	Cumulative Return as of December 31,						5-year
	2012	2013	2014	2015	2016	2017	CAGR
First Republic Bank ("FRC")	$100	$161	$162	$208	$292	$277	23%
KBW Bank Index	$100	$138	$151	$151	$195	$231	18%
S&P 500 Index	$100	$132	$150	$153	$171	$208	16%

Recent Sales of Unregistered Securities

During the quarter ended December 31, 2017, we sold 42,324 shares of common stock to eligible employees under the Employee Stock Purchase Plan for aggregate cash consideration of $3.6 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.

Also, during the quarter ended December 31, 2017, we granted 11,500 restricted stock units, net of forfeitures, that are time vesting. In addition, we granted 9,284 restricted stock units, net of forfeitures, and 9,000 performance share units that vest over time, provided certain performance criteria are achieved. These awards were granted to certain employees and officers, and had an aggregate grant date fair value of $2.8 million. We did not receive any cash consideration in connection with these grants. These grants were exempt from registration under the Securities Act, pursuant to Section (3)(a)(2) thereof because the grants involved securities issued by a bank.

During the quarter ended December 31, 2017, we sold 2,875,000 shares of common stock as part of an underwritten public offering. The aggregate public offering price was approximately $279.7 million, and the aggregate underwriting discount was $4.3 million. Net proceeds, after underwriting discounts, were approximately $275.4 million ($95.80 per share), which we used for general corporate purposes, which included, among other things, funding loans and purchasing investment securities in our portfolio. The principal underwriters in the transaction were Merrill Lynch, Pierce, Fenner & Smith Incorporated, Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and UBS Securities LLC. This transaction was also exempt from registration under the Securities Act, pursuant to Section (3)(a)(2) thereof because the transaction involved securities issued by a bank.

Purchases of Equity Securities By the Issuer and Affiliated Purchasers

We did not repurchase any of our common stock during the fourth quarter of 2017 or at any time since our inception on July 1, 2010.

On January 2, 2018 (the “Series C Redemption Date”), we redeemed all outstanding depositary shares, each representing a 1/40th interest in the Bank’s 5.625% Noncumulative Perpetual Series C Preferred Stock (“Series C Preferred Stock”). In total, 6,000,000 depositary shares were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $150,000,000 plus all accrued and unpaid dividends as of the Series C Redemption Date. As of the Series C Redemption Date, the Series C Preferred Stock was deemed no longer outstanding, and no further dividends will be declared on the Series C Preferred Stock.

Item 6. Selected Financial Data.

The following table presents our selected financial and other data. The balance sheet and results of operations data have been derived from our audited financial statements. Certain of the information presented below under the captions “Selected Ratios,” “Selected Asset Quality Ratios” and “Capital Ratios” is unaudited. The selected financial and other data is qualified in its entirety by, and should be read in conjunction with, “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Item 8. Financial Statements and Supplementary Data.”

($ in millions, except per share amounts)	As of or for the Year Ended December 31, 2017	2016	2015	2014	2013
Selected Financial Data:					
Interest income	$ 2,451	$ 1,981	$ 1,664	$ 1,483	$ 1,356
Interest expense	300	164	148	153	132
Net interest income	2,151	1,817	1,516	1,330	1,224
Provision for loan losses	60	47	55	56	37
Net interest income after provision for loan losses	2,091	1,770	1,461	1,274	1,187
Noninterest income	460	395	325	318	244
Noninterest expense	1,640	1,337	1,096	923	768
Net income	758	673	522	487	462
Dividends on preferred stock	58	69	59	56	41
Net income available to common shareholders	$ 700	$ 605	$ 463	$ 431	$ 421
Selected Ratios:					
Basic earnings per common share (“EPS”)	$ 4.44	$ 4.07	$ 3.27	$ 3.16	$ 3.21
Diluted EPS	$ 4.31	$ 3.93	$ 3.18	$ 3.07	$ 3.10
Net income to average assets	0.95%	1.02%	0.96%	1.06%	1.20%
Net income available to common shareholders to average common equity	10.99%	11.67%	10.72%	11.72%	13.50%
Net income available to common shareholders to average tangible common equity	11.54%	12.38%	11.34%	12.49%	14.68%
Average total equity to average total assets	9.25%	9.59%	9.67%	9.93%	9.87%
Dividends per common share	$ 0.67	$ 0.63	$ 0.59	$ 0.54	$ 0.36
Dividend payout ratio	15.5%	16.1%	18.5%	17.6%	11.6%
Book value per common share	$ 42.23	$ 37.39	$ 32.28	$ 28.13	$ 24.63
Tangible book value per common share	$ 40.43	$ 35.35	$ 30.16	$ 26.56	$ 22.83
Net interest margin (1)	3.13%	3.20%	3.21%	3.32%	3.62%
Efficiency ratio (2)	62.8%	60.5%	59.5%	56.0%	52.3%
Selected Balance Sheet Data:					
Total assets	$ 87,781	$73,278	$58,981	$48,350	$42,113
Investment securities	18,576	15,158	10,452	6,638	4,824
Loans:	62,840	52,008	44,083	37,809	34,001
Less: Allowance for loan losses	(366)	(306)	(261)	(207)	(153)
Loans, net	62,474	51,702	43,822	37,602	33,848
Goodwill and other intangible assets	290	316	309	217	239
Deposits	68,919	58,602	47,893	37,131	32,083
Federal Home Loan Bank (“FHLB”) advances	8,400	5,900	4,000	5,275	5,150
Senior notes	895	398	397	396	—
Subordinated notes	777	387	—	—	—
Total equity	$ 7,818	$ 6,909	$ 5,706	$ 4,778	$ 4,160
Other Financial Information:					
Wealth management assets	$106,961	$83,580	$72,293	$53,377	$41,578
Loans serviced for others	$ 12,495	$11,655	$10,531	$ 9,590	$ 6,000
Selected Asset Quality Ratios:					
Nonperforming assets to total assets	0.04%	0.07%	0.12%	0.10%	0.14%
Nonperforming assets to loans and REO	0.06%	0.09%	0.17%	0.12%	0.17%
Allowance for loan losses to total loans	0.58%	0.59%	0.59%	0.55%	0.45%
Allowance for loan losses to nonperforming loans	972%	625%	355%	451%	281%
Net loan charge-offs to average total loans	0.00%	0.00%	0.00%	0.01%	0.05%
Capital Ratios:					
Tier 1 leverage ratio (3)	8.85%	9.37%	9.21%	9.43%	9.19%
Common Equity Tier 1 ratio (3), (4)	10.63%	10.83%	10.76%	n/a	n/a
Tier 1 common equity ratio (4)	n/a	n/a	n/a	10.90%	10.30%
Tier 1 risk-based capital ratio (3)	12.22%	13.07%	13.13%	13.55%	13.34%
Total risk-based capital ratio (3)	14.11%	14.46%	13.78%	14.20%	13.89%

(continued on following page)

(continued from previous page)

(1) Calculated on a fully taxable-equivalent basis.

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

(3) Beginning in 2015, ratios reflect the adoption of the Basel III Capital Rules, which will be phased in through the end of 2018. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources" for the fully phased-in ratios for 2017. Ratios for prior periods represent the previous capital rules under Basel I.

(4) Beginning in 2015, the Common Equity Tier 1 ratio is a new ratio requirement under the Basel III Capital Rules and represents common equity, less goodwill and intangible assets net of any associated deferred tax liabilities, divided by risk-weighted assets (subject to phase-in adjustments through the end of 2018). In prior periods, the Tier 1 common equity ratio represents common equity, less goodwill and intangible assets, divided by risk-weighted assets.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Introduction

The discussion of our results of operations for the past three fiscal years that follows should be read in conjunction with our financial statements and related notes thereto presented elsewhere in our Annual Report on Form 10-K. In addition to historical information, this discussion includes certain forward-looking statements regarding events and trends that may affect our future results. Refer to "Information Regarding Forward-Looking Statements" on page 3. For a more complete discussion of the factors that could affect our future results, see "Item 1A. Risk Factors."

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

Critical Accounting Policies and the Impact of Accounting Estimates

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to allowance for loan losses and income taxes. 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 accounting policies below to be critical accounting policies 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 Loan Losses

We maintain an allowance for loan losses that represents management's best estimate of probable credit losses inherent in the loan portfolio as of the balance sheet date. As part of our quarterly and ongoing review, management considers historical loss rates, changes in economic conditions, underlying collateral values and other trends and factors. Changes in estimates and assumptions could cause changes in the allowance for loan losses, and therefore, in the related provision for loan losses. For a description of our related accounting policies, see Note 1 in "Item 8. Financial Statements and Supplementary Data."

In determining the allowance for loan losses for loans that do not meet our definition of impaired, loss factors are applied to pools of homogeneous loans with similar risk characteristics. These factors represent credit losses inherent in the portfolio and are based on the Bank's historical loss experience. In determining the allowance for loan losses on the portfolio of impaired loans, measurement is made on an individual loan basis and is determined using the present value of expected future cash flows or the fair value of the underlying collateral, net of estimated selling costs.

We also maintain a qualitative reserve, which represents the qualitative portion of the allowance for loan losses. This qualitative reserve is determined based on management's assessments of the risks that may lead to a loan loss experience different than our historical loss experience and therefore not reflected in the quantitative model. We use qualitative factors that are intended to address developing external and internal environmental trends and include considerations, such as changes in current economic and business conditions, the nature and volume of Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, along with other external factors, such as competition and the legal and regulatory environment.

If the financial condition of our borrowers were to deteriorate, resulting in an impairment of their ability to make payments, or the value of collateral securing mortgage loans were to decline, an increase in the allowance may be required. A significant decline in the credit quality of our loan portfolio requiring an increase in our allowance for loan losses would have a material adverse effect on our financial condition, results of operations and cash flows.

Income Taxes

The Bank estimates income tax expense based on amounts expected to be owed to various tax jurisdictions in which we operate and includes estimates for potential taxes, interest and penalties related to uncertain tax positions. On a quarterly basis, we evaluate tax accruals to determine if they are sufficient based on a probability of potential outcomes. Changes in the estimate of accrued taxes occur periodically due to changes in tax rates and interpretation of tax laws and regulations. On December 22, 2017, the Tax Reform Act was enacted into law. Among other changes, the Tax Reform Act reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. See Note 19 in "Item 8. Financial Statements and Supplementary Data" for additional information.

Deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The Bank records a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized. Management believes it is more likely than not that forecasted income, including income that may be generated as a result of certain tax planning strategies, sources of taxable income in carryback periods and tax effects of the deferred tax liabilities, will be sufficient to fully recover the remaining deferred tax assets. The Bank will continue to evaluate the realizability of the deferred tax assets by assessing the need for a valuation allowance.

A tax position that meets the "more likely than not" recognition threshold is measured to determine the amount of benefits to recognize. The tax position is measured at the largest amount of benefit that is greater than 50% likely of being realized upon settlement. Interest and penalties are recognized as a component of income tax expense.

Current Accounting Developments

For discussion of accounting standards recently issued but not yet effective, refer to Note 1 in "Item 8. Financial Statements and Supplementary Data."

Key Factors Affecting Our Business and Financial Statements

Interest Rates

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

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

See "Item 1A. Risk Factors—We are subject to interest rate risk" and "Item 7A. Quantitative and Qualitative Disclosures About Market Risk."

Regulatory and Supervisory Matters

Our results of operations are affected by the regulatory environment and requirements imposed on us by regulators. The extensive regulation and supervision that govern our business continues to evolve as the legal and regulatory framework changes and as our business grows. In particular, as described further under "Item 1. Business—Supervision and Regulation," the Dodd-Frank Act significantly restructured the financial regulatory regime in the United States. The Dodd-Frank Act, in turn, may itself be subject to potentially significant changes as a result of the recent political developments, including the change in presidential administrations in the U.S., although the nature, extent and timing of any such changes cannot be predicted.

We are subject to the Basel III Capital Rules that took effect on January 1, 2015, as described further under "Item 1. Business—Supervision and Regulation—Capital Requirements."

We are required to conduct annual capital stress tests, as described further under "Item 1. Business—Supervision and Regulation—Annual Capital Stress Tests."

As described further under "Item 1. Business—Supervision and Regulation—Liquidity Rules," because we are a California-chartered, non-member bank without a bank holding company, we are not subject to the LCR Rule. Nevertheless, we maintain on-balance sheet liquidity and a portfolio of HQLA.

As of December 31, 2017, we had $25.6 billion of noninterest-bearing business checking accounts and $2.6 billion of interest-bearing business checking accounts. The prohibition on depository institutions from paying interest on demand deposits, such as checking accounts, was repealed effective July 21, 2011. We began offering interest-bearing corporate checking after July 21, 2011. If we need to offer higher interest on checking accounts to maintain current clients or attract new clients, our interest expense will increase, perhaps materially. Furthermore, if we fail to offer interest in a sufficient amount to keep these demand deposits, our core deposits may be reduced, which would require us to obtain funding in other ways or risk slowing our future asset growth.

The Dodd-Frank Act imposes additional underwriting standards on mortgages and restricts so-called "high-cost mortgages." Because of these restrictions, it may become impractical or impermissible for us to continue to originate certain mortgages with prepayment penalties. This may cause our fee income from prepayment penalties to decrease over time as mortgages with prepayment penalties in our loan portfolio repay and cannot be replaced. For 2017, 2016 and 2015, our revenue from prepayment penalties (including on loans serviced for others) was $9.9 million, $19.5 million and $21.1 million, respectively.

Financial Highlights

Our total assets were $87.8 billion at December 31, 2017 and $73.3 billion at December 31, 2016, a 20% increase.

At December 31, 2017, total investment securities were $18.6 billion, a 23% increase compared to $15.2 billion at December 31, 2016. Total investment securities represented 21% of total assets at both December 31, 2017 and 2016. The increase in investment securities was primarily due to purchases of investments that are considered HQLA and purchases of municipal securities. Our holdings of assets that are considered HQLA, including eligible cash, totaled $10.5 billion at December 31, 2017, compared to $9.0 billion at December 31, 2016. At December 31, 2017, such assets represented 12.4% of average total assets for the fourth quarter of 2017.

At December 31, 2017, loans, excluding loans held for sale, were $62.8 billion, a 21% increase, compared to $52.0 billion at December 31, 2016. Our single family mortgage loans, including loans held for sale and HELOCs, were $34.3 billion and represented 55% of total loans at December 31, 2017, compared to $29.3 billion, or 56% of total loans at December 31, 2016.

Loan origination volume was $27.6 billion in 2017, compared to $25.7 billion in 2016 and $19.7 billion in 2015, an increase of 7% in 2017 and an increase of 31% in 2016. Loan originations increased in 2017 primarily due to increases in single family, multifamily and business lending. Loan originations increased in 2016 primarily due to increases in single family and multifamily lending.

Total deposits were $68.9 billion at December 31, 2017, an increase of 18%, compared to $58.6 billion at December 31, 2016. Deposits increased as a result of expanding existing client relationships, referrals from existing clients, and new deposit clients. At December 31, 2017, balances in business and personal checking accounts were $43.7 billion, or 63% of total deposits, compared to $37.3 billion, or 64% of total deposits at December 31, 2016, as we continued to emphasize building banking relationships through checking and other transaction deposit accounts. At December 31, 2017, business deposits were $37.4 billion and represented 54% of total deposits, compared to $31.0 billion, or 53% of total deposits, at December 31, 2016.

Our Common Equity Tier 1 and total risk-based capital ratios at December 31, 2017 were 10.63% and 14.11%, respectively. The Basel III Capital Rules are subject to a phase-in period through the end of 2018. If fully phased-in, our Common Equity Tier 1 and total risk-based capital ratios at December 31, 2017 would have been 10.57% and 14.09%, respectively. We continue to exceed regulatory guidelines for well-capitalized institutions. Refer to "—Capital Resources" for further discussion of these capital ratios.

Book value per common share was $42.23 at December 31, 2017, a 13% increase from December 31, 2016. Tangible book value per common share was $40.43 at December 31, 2017, a 14% increase from December 31, 2016.

Our capital markets activity for 2017 included the following:

- An underwritten public offering of $500 million of 5-year term, fixed-rate unsecured senior notes. Net proceeds were $495.4 million. The senior notes bear a contractual fixed rate of 2.500% and will mature on June 6, 2022.
- An underwritten public offering of $400 million of 30-year term, fixed-rate unsecured subordinated notes. Net proceeds were $389.3 million. The subordinated notes bear a contractual fixed rate of 4.625% and will mature on February 13, 2047. Such notes qualify as Tier 2 capital.
- A public offering of 8,000,000 depositary shares, each representing a 1/40th interest in a share of the Bank's 5.125% Noncumulative Perpetual Series H Preferred Stock ("Series H Preferred Stock"), at a public offering price of $25.00 per depositary share. The Bank issued 200,000 shares of the Series H Preferred Stock in connection with the offering, each with a liquidation preference of $1,000. Net proceeds, after underwriting discounts and expenses, were $193.7 million.
- Issuance and sale of 5,375,000 new shares of common stock in underwritten public offerings, which added $508.9 million to common equity.
- Redemption of all outstanding shares of our 6.70% Noncumulative Perpetual Series A Preferred Stock and our 6.20% Noncumulative Perpetual Series B Preferred Stock, which totaled $199.5 million and $150.0 million, respectively, plus all accrued and unpaid dividends through each respective date of redemption.

In addition, on January 2, 2018, we redeemed all outstanding shares of our 5.625% Noncumulative Perpetual Series C Preferred Stock at an aggregate amount of $150.0 million.

Cash dividends paid in 2017 were $0.67 per share of common stock, compared to $0.63 in 2016 and $0.59 in 2015. On January 16, 2018, the Bank declared a cash dividend for the fourth quarter of 2017 of $0.17 per share, which was paid on February 8, 2018 to shareholders of record as of January 25, 2018. Any future payment of dividends will be subject to ongoing regulatory oversight and board approval.

Wealth management AUM and AUA increased $23.4 billion, or 28%, to $107.0 billion at December 31, 2017, from $83.6 billion at December 31, 2016. The increase in AUM and AUA was due to net new assets from both existing and new clients and market appreciation.

The Tax Reform Act reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. As a result, the Bank recorded a one-time revaluation adjustment to decrease its deferred tax assets, with a corresponding increase to provision for income taxes of $39.7 million for 2017. See "—Provision for Income Taxes" for additional information.

Results of Operations—Years Ended December 31, 2017, 2016 and 2015

Overview

Net income was $757.7 million in 2017, compared to $673.4 million in 2016 and $522.1 million in 2015, an increase of $84.2 million, or 13%, for 2017 and an increase of $151.3 million, or 29%, for 2016. Diluted EPS were $4.31 for 2017, compared to $3.93 for 2016 and $3.18 for 2015.

Net income for the Commercial Banking segment was $690.7 million in 2017, compared to $618.1 million in 2016 and $484.8 million in 2015, an increase of 12% for 2017 and an increase of 28% for 2016. The Wealth Management segment's net income was $67.0 million in 2017, compared to $55.3 million in 2016 and $37.4 million in 2015, an increase of 21% for 2017 and an increase of 48% for 2016. For a discussion of segment results, see "—Business Segments."

Net Interest Income

Net interest income was $2.2 billion in 2017, compared to $1.8 billion in 2016 and $1.5 billion in 2015, an increase of $334.3 million, or 18%, in 2017 and an increase of $300.5 million, or 20%, in 2016.

Fully taxable-equivalent net interest income was $2.4 billion in 2017, compared to $2.0 billion in 2016 and $1.7 billion in 2015, an increase of $374.2 million, or 19%, in 2017 and an increase of $338.6 million, or 21%, in 2016.

On an average basis, interest-earning assets and interest-bearing liabilities both increased 22% in 2017 and both increased 21% in 2016.

Yields/Rates (Fully Taxable-Equivalent Basis)

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

	Year Ended December 31,								
	2017			2016			2015		
($ in thousands)	**Average Balance**	**Interest Income/ Expense**	**Yields/ Rates**	**Average Balance**	**Interest Income/ Expense**	**Yields/ Rates**	**Average Balance**	**Interest Income/ Expense**	**Yields/ Rates**
Assets:									
Cash and cash equivalents	$ 1,217,293	$ 11,850	0.97%	$ 1,913,466	$ 9,485	0.50%	$ 2,425,747	$ 6,292	0.26%
Investment securities:									
U.S. Treasury and other U.S. Government agency securities	101,164	742	0.73%	33,929	257	0.76%	43,306	638	1.47%
U.S. Government-sponsored agency securities	1,181,353	32,527	2.75%	898,210	25,659	2.86%	900,296	27,484	3.05%
Mortgage-backed securities ("MBS"):									
Agency residential and commercial MBS	7,431,780	186,725	2.51%	5,235,151	125,810	2.40%	2,822,789	70,970	2.51%
Other residential and commercial MBS	8,072	231	2.86%	11,181	288	2.58%	13,610	294	2.16%
Municipal securities [1]	8,097,134	466,302	5.76%	5,993,268	354,594	5.92%	4,181,667	264,991	6.34%
Other investment securities [2]	8,787	174	1.99%	887	—	0.00%	1,333	—	0.00%
Total investment securities	16,828,290	686,701	4.08%	12,172,626	506,608	4.16%	7,963,001	364,377	4.58%
Loans:									
Residential real estate	31,784,581	952,949	3.00%	27,250,593	806,429	2.96%	24,145,369	725,644	3.01%
Multifamily	7,498,125	268,141	3.58%	5,983,850	220,968	3.69%	5,022,053	187,097	3.73%
Commercial real estate	5,761,123	237,035	4.11%	4,943,640	214,414	4.34%	4,143,117	189,485	4.57%
Construction	1,529,192	71,645	4.69%	1,247,480	57,037	4.57%	1,000,157	46,099	4.61%
Business [1]	7,493,820	325,148	4.34%	6,339,146	263,388	4.15%	5,408,780	220,286	4.07%
Other	3,202,979	95,586	2.98%	2,147,611	55,702	2.59%	1,169,958	31,700	2.71%
Total loans	57,269,820	1,950,504	3.41%	47,912,320	1,617,938	3.38%	40,889,434	1,400,311	3.42%
FHLB stock [3]	235,259	14,861	6.32%	154,036	19,266	12.51%	192,135	27,464	14.29%
Total interest-earning assets	75,550,662	2,663,916	3.53%	62,152,448	2,153,297	3.46%	51,470,317	1,798,444	3.49%
Noninterest-earning assets:									
Noninterest-earning cash	324,696			283,292			263,627		
Goodwill and other intangibles	303,498			298,014			235,044		
Other assets	3,272,772			3,001,916			2,504,807		
Total noninterest-earning assets	3,900,966			3,583,222			3,003,478		
Total Assets	$79,451,628			$65,735,670			$54,473,795		
Liabilities and Equity:									
Deposits:									
Checking	$38,792,204	10,818	0.03%	$33,150,987	3,703	0.01%	$25,993,413	1,282	0.00%
Money market checking and savings	16,999,755	45,852	0.27%	14,979,993	15,305	0.10%	12,905,039	8,990	0.07%
CDs	6,133,143	78,116	1.27%	4,642,625	54,757	1.18%	4,086,327	50,800	1.24%
Total deposits	61,925,102	134,786	0.22%	52,773,605	73,765	0.14%	42,984,779	61,072	0.14%
Borrowings:									
Short-term borrowings	670,919	7,601	1.13%	499,253	3,311	0.66%	120,339	876	0.73%
Long-term FHLB advances	7,019,452	105,272	1.50%	4,459,836	68,487	1.54%	4,772,192	74,686	1.57%
Senior notes [4]	682,216	17,883	2.62%	397,559	10,295	2.59%	396,774	10,276	2.59%
Subordinated notes [4]	731,018	34,197	4.68%	161,920	7,377	4.56%	—	—	—%
Other borrowings	17,722	416	2.35%	28,076	476	1.69%	32,017	519	1.62%
Total borrowings	9,121,327	165,369	1.81%	5,546,644	89,946	1.62%	5,321,322	86,357	1.62%
Total interest-bearing liabilities	71,046,429	300,155	0.42%	58,320,249	163,711	0.28%	48,306,101	147,429	0.31%
Noninterest-bearing liabilities	1,052,700			1,109,027			899,116		
Preferred equity	987,633			1,123,132			949,525		
Common equity	6,364,866			5,183,262			4,319,053		
Total Liabilities and Equity	$79,451,628			$65,735,670			$54,473,795		
Net interest spread [5]			3.11%			3.18%			3.18%
Net interest income (fully taxable-equivalent basis) and net interest margin [6]		$2,363,761	3.13%		$1,989,586	3.20%		$1,651,015	3.21%
Reconciliation of tax-equivalent net interest income to reported net interest income:									
Municipal securities tax-equivalent adjustment		(164,864)			(127,889)			(95,695)	
Business loans tax-equivalent adjustment		(47,434)			(44,535)			(38,657)	
Net interest income, as reported		$2,151,463			$1,817,162			$1,516,663	

(continued on following page)

(continued from previous page)

(1) Interest income is presented on a fully taxable-equivalent basis.
(2) Includes mutual funds and marketable equity securities.
(3) Yields for 2016 and 2015 include special FHLB dividends received of $5.9 million and $9.1 million, respectively.
(4) Average balances include unamortized issuance discounts and costs. Interest expense includes amortization of issuance discounts and costs.
(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.

Interest Income

Total interest income consists of interest income on loans and investments, FHLB stock dividends, and interest income on cash and cash equivalents. Total interest income was $2.5 billion in 2017, compared to $2.0 billion in 2016 and $1.7 billion in 2015, an increase of $470.7 million, or 24% in 2017 and an increase of $316.8 million, or 19% in 2016. The increases were the result of increases in average interest-earning assets of 22% in 2017 and 21% in 2016. Average interest-earning assets were $75.6 billion in 2017, compared to $62.2 billion in 2016 and $51.5 billion in 2015. The average yield on interest-earning assets was 3.53% in 2017, compared to 3.46% in 2016 and 3.49% in 2015.

Loans

Interest income on loans was $1.9 billion in 2017, compared to $1.6 billion in 2016 and $1.4 billion in 2015, an increase of $329.7 million, or 21%, for 2017 and an increase of $211.7 million, or 16%, for 2016. The increases were due to continued loan growth. Fully taxable-equivalent interest income on loans was $2.0 billion in 2017, compared to $1.6 billion in 2016 and $1.4 billion in 2015, an increase of $332.6 million, or 21%, in 2017 and an increase of $217.6 million, or 16%, in 2016.

Average loan balances were $57.3 billion for 2017, compared to $47.9 billion for 2016 and $40.9 billion for 2015, an increase of $9.4 billion, or 20%, during 2017 and an increase of $7.0 billion, or 17%, during 2016. The average yield on loans was 3.41% in 2017, compared to 3.38% in 2016 and 3.42% in 2015, an increase of 3 basis points during 2017 and a decrease of 4 basis points during 2016.

Interest income on loans included prepayment penalty fees of $7.5 million, $14.0 million and $16.2 million in 2017, 2016 and 2015, respectively. The decrease in 2017 was primarily due to lower prepayments on multifamily and single family loans. The decrease in 2016 was primarily due to lower prepayments on single family 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 was 3.32% at December 31, 2017, compared to 3.17% at December 31, 2016. For ARMs, the yield is also affected by the timing of changes in the loan rates, which generally lag market rate changes. At December 31, 2017, approximately 35% of our total loans were adjustable-rate or mature within one year, compared to 38% at December 31, 2016.

Investments

Interest income on investments was $521.8 million in 2017, compared to $378.7 million in 2016 and $268.7 million in 2015, an increase of $143.1 million, or 38%, in 2017 and an increase of $110.0 million, or 41%, in 2016. The increases were due to purchases of new investments. Average investment balances were

$16.8 billion in 2017, compared to $12.2 billion in 2016 and $8.0 billion in 2015, an increase of $4.7 billion, or 38%, in 2017 and an increase of $4.2 billion, or 53%, in 2016. The increases were primarily due to purchases of HQLA and municipal securities. The average yield on investment securities was 4.08% in 2017, compared to 4.16% in 2016 and 4.58% in 2015, a decline of 8 basis points in 2017 and a decline of 42 basis points in 2016. The yield declines were the result of a change in the mix of the investment portfolio from increases in our holdings of agency MBS, which are considered HQLA, and also due to purchases of new municipal securities at slightly lower yields than the existing portfolio as a result of very strong market demand for municipal securities in 2017, which led to lower yields on new purchases. Fully taxable-equivalent interest income on investments was $686.7 million in 2017, compared to $506.6 million in 2016 and $364.4 million in 2015, an increase of $180.1 million, or 36%, in 2017 and an increase of $142.2 million, or 39%, in 2016.

FHLB Stock

Dividends on FHLB stock were $14.9 million in 2017, compared to $19.3 million in 2016 and $27.5 million in 2015, a decrease of $4.4 million, or 23%, in 2017 and a decrease of $8.2 million, or 30%, in 2016. The average yield on FHLB stock was 6.32% in 2017, compared to 12.51% in 2016 and 14.29% in 2015. The decline in dividend income and yield in 2017 was primarily due to lower dividend rates, partially offset by higher average FHLB stock balances. Also, dividend income in 2016 included a special FHLB dividend of $5.9 million. The decline in 2016 was due to lower average FHLB stock balances. Also, dividend income in 2015 included a special FHLB dividend of $9.1 million. Average FHLB stock balances were $235.3 million in 2017, compared to $154.0 million in 2016 and $192.1 million in 2015, an increase of $81.2 million, or 53%, in 2017 and a decrease of $38.1 million, or 20%, in 2016.

Interest Expense

Total interest expense consists of interest expense on deposits, FHLB advances, senior notes, subordinated notes and other borrowings. Total interest expense was $300.2 million in 2017, compared to $163.7 million in 2016 and $147.4 million in 2015, an increase of $136.4 million, or 83%, during 2017 and an increase of $16.3 million, or 11% during 2016. The increase in 2017 was the result of an increase in the amount of average interest-bearing liabilities, which were $71.0 billion in 2017, compared to $58.3 billion in 2016 and an increase in the average cost of interest-bearing liabilities to 0.42% in 2017 from 0.28% in 2016. The increase in 2016 was the result of an increase in the amount of average interest-bearing liabilities, which were $58.3 billion in 2016, compared to $48.3 billion in 2015, partially offset by a decline in the average cost of interest-bearing liabilities to 0.28% in 2016 from 0.31% in 2015.

Deposits

Interest expense on deposits was $134.8 million for 2017, compared to $73.8 million in 2016 and $61.1 million in 2015, an increase of 83% for 2017 and an increase of 21% for 2016. The increases were primarily due to an increase in rates paid on deposits due to an increase in market rates of interest, as well as an increase in average deposit balances. The average interest rate paid on deposits was 0.22% for 2017 and 0.14% for both 2016 and 2015.

Average deposit balances were $61.9 billion in 2017, compared to $52.8 billion in 2016 and $43.0 billion in 2015, an increase of $9.2 billion, or 17%, for 2017 and an increase of $9.8 billion, or 23%, for 2016. The following table presents average deposit balances by deposit type as a percentage of average total deposits:

	Year Ended December 31,		
Average Deposits by Type as a % of Average Total Deposits	**2017**	**2016**	**2015**
Checking	63%	63%	60%
Money market checking and savings	27%	28%	30%
CDs	10%	9%	10%

At December 31, 2017, our total deposits were $68.9 billion, compared to $58.6 billion at December 31, 2016, an increase of 18%, and the weighted average contractual rate paid on total deposits was 0.28% and 0.14%, respectively. We will continue to focus on growth in our core deposit base to fund a significant percentage of our future asset growth, although there can be no assurance we will be successful. If we are not successful, we may need to use other sources of funding, such as FHLB advances, unsecured term senior notes or unsecured term subordinated notes, which are generally higher in cost.

Borrowings

Interest expense on borrowings was $165.4 million in 2017, compared to $89.9 million in 2016, and $86.4 million in 2015, an increase of $75.4 million, or 84%, during 2017 and an increase of $3.6 million, or 4%, during 2016. Such increases were primarily due to an increase in long-term FHLB advances, two new issuances of 30-year, fixed-rate subordinated notes in August 2016 and February 2017, and an issuance of 5-year, fixed-rate senior notes in June 2017.

Short-term borrowings, which include federal funds purchased, short-term FHLB advances and securities sold under agreements to repurchase, have an original maturity of one year or less. At both December 31, 2017 and 2016, short-term borrowings were $100.0 million. Interest expense on short-term borrowings was $7.6 million in 2017, compared to $3.3 million in 2016 and $876,000 in 2015. The increase in 2017 was primarily due to an increase in the average cost of short-term borrowings as short-term interest rates have risen over the past year consistent with actions taken by the FOMC, and an increase in average short-term borrowings. The increase in 2016 was primarily due to an increase in average short-term borrowings. Average short-term borrowings for 2017 were $670.9 million, compared to $499.3 million for 2016 and $120.3 million for 2015. The average cost of short-term borrowings was 1.13% for 2017, compared to 0.66% for 2016 and 0.73% for 2015.

At December 31, 2017, long-term FHLB advances outstanding were $8.3 billion, compared to $5.9 billion at December 31, 2016. Interest expense on long-term FHLB advances was $105.3 million in 2017, compared to $68.5 million in 2016 and $74.7 million in 2015, an increase of $36.8 million, or 54%, during 2017 and a decrease of $6.2 million, or 8%, during 2016. The increase in 2017 was primarily due to higher average balances, partially offset by a decrease in the average cost of long-term FHLB advances. The decrease in 2016 was primarily due to a decrease in average long-term FHLB advances. Average long-term FHLB advances for 2017 were $7.0 billion, compared to $4.5 billion for 2016 and $4.8 billion for 2015, an increase of 57% for 2017 and a decrease of 7% for 2016. Average long-term FHLB advances as a proportion of total average interest-bearing liabilities were 10% for both 2017 and 2015 and 8% for 2016. The average cost of long-term FHLB advances was 1.50%, 1.54% and 1.57% for 2017, 2016 and 2015, respectively.

At December 31, 2017, the carrying value of unsecured senior notes was $894.7 million, compared to $398.0 million at December 31, 2016. Interest expense on our fixed-rate senior notes was $17.9 million in 2017 and $10.3 million in both 2016 and 2015, and includes contractual interest, increased by amortization of issuance discounts and offering costs. The increase in interest expense was due to the issuance of new senior notes in the amount of $500 million in June 2017.

At December 31, 2017, the carrying value of unsecured subordinated notes totaled $777.1 million, compared to $387.4 million at December 31, 2016. The subordinated notes were issued in August 2016 and February 2017. Interest expense on our fixed-rate subordinated notes in 2017 was $34.2 million, compared to $7.4 million in 2016 and includes contractual interest, increased by amortization of issuance discounts and offering costs.

Rate and Volume Variances (Fully Taxable-Equivalent Basis)

Net interest income is affected by changes in both volume and interest rates. Volume changes are caused by increases or decreases during the year in the level of average interest-earning assets and average interest-bearing liabilities. Rate changes result from increases or decreases in the yields earned on assets or the rates paid on liabilities. The following table presents for each of the last two years a summary of the changes in interest income and interest expense resulting from changes in the volume of average asset and liability balances and changes in the average yields or rates compared to the preceding year, on a fully taxable-equivalent basis. Unallocated changes in interest income or interest expense due to both volume and rate changes (such as for changes in investment or borrowing types) have been allocated proportionally between the volume and the rate variances.

	2017 vs. 2016			2016 vs. 2015		
($ in thousands)	**Volume**	**Rate**	**Total**	**Volume**	**Rate**	**Total**
Increase (decrease) in interest income:						
Cash and cash equivalents	$ (5,241)	$ 7,606	$ 2,365	$ (1,764)	$ 4,957	$ 3,193
Investment securities:						
U.S. Treasury and other U.S. Government agency securities	494	(9)	485	(123)	(258)	(381)
U.S. Government-sponsored agency securities	7,836	(968)	6,868	(64)	(1,761)	(1,825)
MBS:						
Agency residential and commercial MBS	54,883	6,032	60,915	58,217	(3,377)	54,840
Other residential and commercial MBS	(87)	30	(57)	(58)	52	(6)
Municipal securities	121,475	(9,767)	111,708	108,644	(19,041)	89,603
Other investment securities	74	100	174	—	—	—
Loans:						
Residential real estate	135,789	10,731	146,520	92,065	(11,280)	80,785
Multifamily	54,398	(7,225)	47,173	35,533	(1,662)	33,871
Commercial real estate	34,137	(11,516)	22,621	35,196	(10,267)	24,929
Construction	13,162	1,446	14,608	11,312	(374)	10,938
Business	49,642	12,118	61,760	38,565	4,537	43,102
Other	30,323	9,561	39,884	25,458	(1,456)	24,002
FHLB stock	8,849	(13,254)	(4,405)	(5,013)	(3,185)	(8,198)
Total increase (decrease)	505,734	4,885	510,619	397,968	(43,115)	354,853
Increase (decrease) in interest expense:						
Deposits:						
Checking	814	6,301	7,115	478	1,943	2,421
Money market checking and savings	2,607	27,940	30,547	1,650	4,665	6,315
CDs	18,657	4,702	23,359	6,671	(2,714)	3,957
Short-term borrowings	1,446	2,844	4,290	2,541	(106)	2,435
Long-term FHLB advances	38,444	(1,659)	36,785	(4,816)	(1,383)	(6,199)
Senior notes	7,459	129	7,588	20	(1)	19
Subordinated notes	26,600	220	26,820	7,377	—	7,377
Other borrowings	(223)	163	(60)	(64)	21	(43)
Total increase (decrease)	95,804	40,640	136,444	13,857	2,425	16,282
Increase (decrease) in net interest income	$409,930	$(35,755)	$374,175	$384,111	$(45,540)	$338,571

Provision for Loan Losses

The provision for loan losses was $60.2 million for 2017, compared to $47.2 million for 2016 and $55.4 million for 2015. The provision for loan losses is related primarily to growth in loans outstanding and reflects management's continuing assessment of the credit quality of the Bank's loan portfolio and our overall allowance methodology, which considers, among other things, the Bank's loan growth, level and type of loans originated and trends in the Bank's markets.

Noninterest Income

The following table presents noninterest income:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Noninterest income:			
Investment management fees	$282,868	$224,626	$178,738
Brokerage and investment fees	32,221	31,868	19,659
Trust fees	13,658	12,365	10,745
Foreign exchange fee income	27,691	22,406	22,517
Deposit fees	22,633	20,699	19,311
Loan and related fees	13,012	14,097	12,393
Loan servicing fees, net	13,800	13,465	13,040
Gain on sale of loans	9,233	4,828	9,725
Gain (loss) on investment securities, net	(833)	1,055	821
Income from investments in life insurance	37,874	48,119	35,474
Other income	8,304	1,284	2,630
Total noninterest income	$460,461	$394,812	$325,053

Noninterest income for 2017 was $460.5 million, compared to $394.8 million for 2016 and $325.1 million for 2015, an increase of $65.6 million, or 17%, in 2017 and an increase of $69.8 million, or 21%, in 2016. The increase in 2017 was primarily due to increases in investment management fees, foreign exchange fee income and gain on sale of loans, partially offset by a decrease in income from investments in life insurance. The increase in 2016 was primarily due to increases in investment management fees, income from investments in life insurance and brokerage and investment fees, partially offset by a decrease in gain on sale of loans.

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 and fees earned for assisting clients with foreign exchange transactions. For additional information on the AUM and AUA for the entities comprising the Wealth Management segment, see "—Business Segments."

Investment management fees. We provide traditional portfolio management and customized client portfolios through FRIM. We earn fee income from the management of equity securities, fixed income securities, balanced portfolios and alternative investments for our clients. In addition, we employ experienced wealth managers to work with our relationship managers to generate new AUM using an open architecture platform. Investment management fees were $282.9 million in 2017, $224.6 million in 2016 and $178.7 million in 2015, an increase of $58.2 million, or 26%, in 2017 and an increase of $45.9 million, or 26%, in 2016. The increases in investment management fees in 2017 and 2016 were due to an increase in AUM from the addition of assets from existing and new clients and market appreciation. FRIM's AUM were $52.7 billion at December 31, 2017, compared to $41.2 billion at December 31, 2016, an increase of 28%. Investment management fees increased in 2016 also as a result of fees earned from assets acquired in the Constellation Wealth Advisors ("Constellation") asset purchase

in the fourth quarter of 2015. The addition of client assets was the result of growth in investment management services to Bank clients, acquiring new clients, the successful marketing efforts of existing wealth managers and the hiring of experienced wealth managers who brought their clients with them. Investment management fees vary with the amount of assets managed and the type of investment chosen by the client. Generally, these wealth managers earn higher fees for managing equity securities than for managing a fixed income portfolio. The future level of these fees depends on the level and mix of AUM, market conditions and our ability to attract new clients.

Brokerage and investment fees. We perform brokerage and investment activities for clients through FRSC. We employ wealth managers to acquire treasury securities, municipal bonds, money market mutual funds and other shorter-term liquid investments at the request of clients or their financial advisors, and to offer sales of insurance and annuity products to clients. These wealth managers can also execute transactions for a full array of longer-term equity and fixed income securities. Brokerage and investment fees were $32.2 million in 2017, $31.9 million in 2016 and $19.7 million in 2015, a slight increase in 2017 and an increase of $12.2 million in 2016. Such fees vary based on the level and mix of AUA, conditions in the equity markets, volume of transaction activity, level of sales of insurance and annuity products, and our ability to attract new clients. At December 31, 2017, we held $44.7 billion of client assets in brokerage accounts through FRSC and in third-party money market mutual funds, compared to $34.3 billion at December 31, 2016, an increase of 30%.

Trust fees. First Republic Trust Company, a division of the Bank, and First Republic Trust Company of Delaware LLC ("FRTC Delaware") (collectively, the "Trust Company") specializes in personal trusts and custody services and operates in California, Oregon, Washington, New York, Massachusetts, Delaware, Florida and Connecticut. The Trust Company draws new trust clients from our Preferred Banking and wealth management client base, as well as from outside of our organization. Trust fees were $13.7 million in 2017, $12.4 million in 2016 and $10.7 million in 2015, an increase of $1.3 million, or 10%, in 2017 and an increase of $1.6 million, or 15%, in 2016. The increases in 2017 and 2016 were primarily due to increases in assets under custody or administration from existing and new clients. At December 31, 2017, assets under custody or administration were $9.6 billion, compared to $8.2 billion at December 31, 2016, an increase of 17%. Trust fees are primarily based on the level and mix of assets under custody or administration and will vary in the future based on these factors.

Foreign exchange fee income. Foreign exchange fee income represents fees we earn from transacting foreign exchange business on behalf of our clients. We earned foreign exchange income of $27.7 million in 2017, compared to $22.4 million in 2016 and $22.5 million in 2015, an increase of $5.3 million, or 24% in 2017 and a slight decrease in 2016. The amount of foreign exchange fees is primarily driven by volume of activity 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.

Other Noninterest Income

Deposit fees. We earn fees from our clients for deposit services. Deposit fees were $22.6 million in 2017, compared to $20.7 million in 2016 and $19.3 million in 2015, an increase of 9% for 2017 and an increase of 7% for 2016. The increases in deposit fees were primarily driven by volume of activity from both existing and new clients and growth in overall deposits.

Loan and related fees. Loan and related fee income was $13.0 million in 2017, compared to $14.1 million in 2016 and $12.4 million in 2015. Loan and related fee income includes: late charge income, which generally increases with growth in the average loan and servicing portfolios; loan-related processing fees that vary with market conditions and loan 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. We collected prepayment penalty fees on loans serviced for others of $2.4 million in 2017, $5.5 million in 2016 and $4.8 million in 2015.

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

	Year Ended December 31,		
($ in thousands)	**2017**	**2016**	**2015**
Contractually specified servicing fees	$ 30,069	$ 27,450	$ 25,673
Amortization expense	(16,269)	(13,985)	(12,633)
Loan servicing fees, net	$ 13,800	$ 13,465	$ 13,040

Contractual servicing fees were $30.1 million in 2017, compared to $27.5 million in 2016 and $25.7 million in 2015, an increase of $2.6 million, or 10%, in 2017 and an increase of $1.8 million, or 7%, in 2016. The increases were primarily due to the growth in the servicing portfolio. The average servicing portfolio for 2017 was $11.9 billion, compared to $10.9 billion for 2016 and $10.1 billion for 2015, an increase of 9% in 2017 and an increase of 8% in 2016. The amount of contractual servicing fees depends upon the size of the servicing portfolio, the terms of the loans at origination, the interest rate environment and conditions in the secondary market when the loans are sold, as well as the rate of loan payoffs. Weighted average servicing fees collected as a percentage of loans serviced were approximately 0.25% for 2017, 2016 and 2015.

The amount of net loan servicing fees that we record is affected by the repayment of loans in the servicing portfolio. In 2017, the overall repayment speed experienced on loans serviced was 15%, compared to 17% in 2016 and 14% in 2015. If actual repayments of loans serviced are lower than our estimate of future repayments, we could reduce the amortization of MSRs and release a valuation allowance, if any, which would increase our expected level of future earnings. If actual repayments on loans serviced are higher than our estimates of future repayments, we may be required to increase the amortization of MSRs and reduce the carrying value of MSRs through the establishment of a valuation allowance, thereby decreasing our expected level of current and future earnings.

Gain on sale of loans. The net gain on sales of loans fluctuates with the amount of loans sold, the type of loans sold and market conditions such as the current interest rate environment. The amount of loans that we sell depends upon conditions in the mortgage origination, loan securitization and secondary loan sales markets. The following table presents loan sales activity and gain on sale of loans:

	Year Ended December 31,		
($ in thousands)	**2017**	**2016**	**2015**
Gain on sale of loans	$ 9,233	$ 4,828	$ 9,725
Loans sold	$2,877,177	$3,147,427	$2,429,260
Gain on sale of loans as a percentage of loans sold	0.32%	0.15%	0.40%

The higher level of gain on sales for 2017 was the result of higher margins, partially offset by a lower volume of loans sold. The lower level of gains in 2016 was the result of lower margins, partially offset by a higher volume of loans sold.

Income from investments in life insurance. Income from investments in bank-owned life insurance was $37.9 million in 2017, $48.1 million in 2016 and $35.5 million in 2015. The increase in 2016 was due to higher average balances of investments in life insurance from new purchases and a gain of $9.7 million from life insurance proceeds. The book value of this portfolio of tax-exempt investments was $1.3 billion at both December 31, 2017 and 2016.

Other income. Other income was $8.3 million for 2017, compared to $1.3 million for 2016 and $2.6 million for 2015. Other income for 2017 included a $5.3 million gain from the sale of a private investment.

Noninterest Expense

The following table presents noninterest expense:

	Year Ended December 31,		
($ in thousands)	2017	2016	2015
Noninterest expense:			
Salaries and employee benefits	$ 930,908	$ 763,625	$ 596,593
Information systems	208,625	153,207	119,114
Occupancy	136,746	119,139	106,856
Professional fees	56,950	52,740	73,022
FDIC assessments	55,792	44,200	35,250
Advertising and marketing	48,398	32,783	25,562
Amortization of intangibles	20,625	25,002	21,760
Other expenses	181,497	146,490	117,452
Total noninterest expense	$1,639,541	$1,337,186	$1,095,609

Noninterest expense was $1.6 billion in 2017, compared to $1.3 billion in 2016 and $1.1 billion in 2015, an increase of $302.4 million, or 23%, in 2017 and an increase of $241.6 million, or 22%, in 2016. The increase in 2017 was primarily due to higher salaries and employee benefits, information systems and advertising and marketing costs. The increase in 2016 was primarily due to higher salaries and employee benefits, information systems and occupancy costs, partially offset by lower professional fees. The overall increases in expenses were primarily attributable to continued investments in the expansion of the franchise. The increase in 2017 was also attributable to investments in Gradifi.

Noninterest expense was reduced by certain general and administrative costs, primarily compensation costs directly related to loan originations, which have been capitalized in accordance with Accounting Standards Codification ("ASC") 310-20, "Nonrefundable Fees and Other Costs." We capitalized loan origination costs of $124.2 million in 2017, compared to $108.0 million in 2016 and $81.1 million in 2015, an increase of $16.2 million, or 15%, in 2017 and an increase of $26.9 million, or 33%, in 2016. The amount of capitalized costs varies directly with the volume and type of loan originations and the costs incurred to make new loans. The capitalized costs are reported as net deferred loan fees and costs on our balance sheet and are amortized to interest income over the contractual life of the loans.

Our efficiency ratio, the ratio of noninterest expense to the sum of net interest income and noninterest income, was 62.8% in 2017, compared to 60.5% in 2016 and 59.5% in 2015. The increases in the efficiency ratio

in 2017 and 2016 were primarily attributable to increased expenses related to continued investments in the expansion of the franchise. The increase in 2017 was also attributable to investments in Gradifi.

Salaries and employee benefits. Salaries and employee benefits is the largest component of noninterest expense and includes the cost of salaries, incentive compensation, benefit plans, health insurance and payroll taxes, which have collectively increased in each of the past several years as we hired additional personnel to support our growth and our enhanced regulatory infrastructure. Salaries and employee benefit expenses were $930.9 million in 2017, compared to $763.6 million in 2016 and $596.6 million in 2015, an increase of $167.3 million, or 22%, in 2017 and an increase of $167.0 million, or 28%, in 2016. The increases were primarily the result of the addition of new personnel to support higher levels of lending, deposit growth, expansion of wealth management and higher incentive compensation related to the continued expansion of our franchise, as well as the addition of personnel supporting regulatory compliance activities. At December 31, 2017, we had 4,025 full-time equivalent employees, including temporary employees and independent contractors, a 13% increase from 3,566 full-time equivalent employees at December 31, 2016.

Information systems. These expenses include payments to vendors that provide software and services on an outsourced basis, costs related to supporting and developing digital platforms and the costs associated with telecommunications for ATMs, office activities and internal networks. Expenses for information systems were $208.6 million in 2017, $153.2 million in 2016 and $119.1 million in 2015, an increase of $55.4 million, or 36%, in 2017 and an increase of $34.1 million, or 29%, in 2016. The increases in information systems costs were primarily due to continued technology initiatives to upgrade our systems including a new mobile and online banking platform, enhance client experience and support our growth, as well as to enhance our regulatory compliance infrastructure.

Occupancy. Occupancy costs were $136.7 million in 2017, $119.1 million in 2016 and $106.9 million in 2015, an increase of $17.6 million, or 15%, in 2017 and an increase of $12.3 million, or 11%, in 2016. The increases in occupancy costs in 2017 and 2016 were primarily due to expanding our office space in existing markets for new employees, increased rental costs in certain locations and rental costs for future 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 enhancing regulatory compliance activities and technology initiatives. Such expenses were $57.0 million in 2017, compared to $52.7 million in 2016 and $73.0 million in 2015, an increase of $4.2 million, or 8%, in 2017 and a decrease of $20.3 million, or 28%, in 2016. The increase in professional fees in 2017 was primarily due to higher legal fees and consulting fees related to continued investments in the expansion of the franchise. The decrease in professional fees in 2016 was primarily due to transitioning from consultant spending to permanent staffing for regulatory compliance activities.

FDIC assessments. FDIC assessments were $55.8 million in 2017, $44.2 million in 2016 and $35.3 million in 2015, an increase of $11.6 million, or 26%, in 2017 and an increase of $9.0 million, or 25%, in 2016. The increases in 2017 and 2016 resulted from the new FDIC assessment surcharge, which became effective in the third quarter of 2016 and a higher assessment base as a result of the growth in assets, partially offset by a decrease in our assessment rate.

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 related to Gradifi. Advertising and marketing expenses were $48.4 million in 2017,

$32.8 million in 2016 and $25.6 million in 2015. These expenses vary based on the number of marketing initiatives, level of advertising costs and costs associated with holding client events to support our growth. The increase in 2017 included increased expenses related to marketing initiatives associated with the Bank's next generation of clients and Gradifi.

Amortization of intangibles. Amortization expense was $20.6 million in 2017, compared to $25.0 million in 2016 and $21.8 million in 2015. Amortization expense decreased in 2017 due to the accelerated method of recording intangible amortization. The increase in amortization expense in 2016 was due to the addition of customer relationship intangible assets from the Constellation asset purchase in the fourth quarter of 2015.

Other expenses. Other expenses were $181.5 million in 2017, compared to $146.5 million in 2016 and $117.5 million in 2015, an increase of 24% in 2017 and an increase of 25% in 2016. These expenses include costs related to lending activities, client service, insurance, hiring and other costs related to expanding operations. Other operating expenses include postage, charitable contributions, cash management, custody and clearing, training, and other miscellaneous expenses. Expenses in this category have increased primarily due to higher transaction volumes of loans, deposits and AUM and AUA, as well as an increase in the number of locations and employees. The following table presents the main components of other expenses:

	Year Ended December 31,		
($ in thousands)	**2017**	**2016**	**2015**
Other expenses:			
Deposit client related costs	$ 39,891	$ 27,772	$ 21,719
Travel and entertainment	20,163	16,036	12,679
Loan related costs	18,886	15,643	11,009
Subscriptions	11,989	11,282	7,497
Insurance expense	11,218	10,433	9,638
Recruiting fees	8,566	6,622	8,235
Other operating expenses	70,784	58,702	46,675
Total other expenses	$181,497	$146,490	$117,452

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 Tax Reform Act reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. As a result, the Bank recorded a one-time revaluation adjustment to decrease its deferred tax assets, with a corresponding increase to provision for income taxes of $39.7 million for 2017. See Note 19 in "Item 8. Financial Statements and Supplementary Data" for additional information. In addition, during 2017, the increased volume of stock option exercises by Bank employees and directors in response to tax reform legislation resulted in $75.8 million of excess tax benefits related to stock options, which decreased the Bank's provision for income taxes. In comparison, during 2016, the Bank recognized $34.7 million of excess tax benefits related to stock options as a reduction in the provision for income taxes.

In accordance with the amendments to ASC 718, "Compensation—Stock Compensation," which became effective in 2016, excess tax benefits from exercise or vesting of share-based awards are recorded as a reduction in provision for income taxes in the period of exercise or vesting. Prior to 2016, excess tax benefits were recorded in additional paid-in capital (not as a reduction in provision for income taxes in the period of exercise). Beginning in 2016, the effective tax rate reflects the adoption of this guidance.

The Bank's effective tax rate for 2017 was 16.9%, compared to 18.6% for 2016 and 24.4% for 2015. The effective tax rate varies based on the level of tax credit investments, tax-exempt securities, tax-advantaged loans, bank-owned life insurance and, beginning in 2016, the amount of excess tax benefits. The decrease in the effective tax rate in 2017 resulted primarily from increased tax benefits from the continued growth in tax-advantaged investments and an increase in volume of stock option exercises by Bank employees and directors, partially offset by a one-time revaluation of deferred tax assets. The decrease in the effective tax rate in 2016 was primarily from excess tax benefits from exercised stock options, and increased tax benefits from low income housing tax credit investments and tax-exempt securities.

The Bank will continue to assess future guidance related to the Tax Reform Act and may also identify additional adjustments to its recorded deferred tax assets upon filing of its 2017 U.S. income tax return, but does not currently anticipate significant revisions to its deferred tax assets or provision for 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 attracting funds from the general public, originating loans (primarily real estate secured mortgage loans) and investing in investment securities. The primary sources of revenue for this segment are: (1) interest earned on loans and investment securities, (2) gains on sales of loans, (3) fees earned in connection with loan and deposit services and (4) income earned on loans serviced for investors. Principal expenses for this segment are interest incurred on interest-bearing liabilities, including deposits and borrowings, general and administrative costs and provision for loan losses.

Our Wealth Management segment consists of (i) FRIM; (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) the Trust Company; and (iv) our foreign exchange activities. The Wealth Management segment's primary sources of revenue are 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 and fees earned for assisting clients with foreign exchange transactions. In addition, Wealth Management earns fee income for offering sales of insurance and annuity products to clients and managing the Bank's investment portfolio and 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 22 in "Item 8. Financial Statements and Supplementary Data."

Commercial Banking

Net interest income for Commercial Banking was $2.1 billion for 2017, compared to $1.8 billion for 2016 and $1.5 billion for 2015, an increase of 19% in both 2017 and 2016. The increases in net interest income in 2017 and 2016 were primarily due to an increase in interest-earning assets.

The provision for loan losses for Commercial Banking was $60.2 million for 2017, compared to $47.2 million for 2016 and $55.4 million for 2015, an increase of 28% in 2017 and a decrease of 15% in 2016. The provision for loan losses is related primarily to growth in loans outstanding and reflects management's continuing assessment of the credit quality of the Bank's loan portfolio and our overall allowance methodology, which considers, among other things, the Bank's loan growth, level and type of loans originated and trends in the Bank's markets.

Noninterest income for Commercial Banking was $100.1 million for 2017, compared to $102.9 million for 2016 and $92.0 million for 2015, a decrease of 3% in 2017 and an increase of 12% in 2016. The decrease in 2017 was primarily due to lower income from investments in life insurance, which was partially offset by a gain from the sale of a private investment. The increase in 2016 was primarily due to higher income from investments in life insurance, partially offset by lower gain on sale of loans.

Noninterest expense for Commercial Banking was $1.3 billion for 2017, compared to $1.1 billion for 2016 and $888.3 million for 2015, an increase of 23% in 2017 and an increase of 21% in 2016. The increase in 2017 was primarily due to higher salaries and employee benefits, information systems and advertising and marketing costs. The increase in 2016 was primarily due to higher salaries and employee benefits, information systems and occupancy costs, partially offset by lower professional fees. The overall increases in expenses were primarily attributable to continued investments in the expansion of the franchise. The increase in 2017 was also attributable to investments in Gradifi.

Provision for income taxes for Commercial Banking for 2017 was $110.6 million, compared to $117.5 million for 2016 and $141.2 million for 2015, a decrease of 6% in 2017 and a decrease of 17% in 2016. The decrease in the provision for income taxes for 2017 resulted primarily from the continued growth in tax-advantaged investments and the increase in the volume of stock option exercises by Bank employees and directors, partially offset by the one-time revaluation of deferred tax assets. The decrease in the provision for income taxes for 2016 was primarily from increased tax benefits from exercised stock options, low income housing tax credit investments and tax-exempt securities.

Wealth Management

Net interest income for Wealth Management was $67.3 million for 2017, compared to $59.8 million for 2016 and $39.0 million for 2015, an increase of 13% in 2017 and an increase of 53% in 2016. Net interest income is earned from Wealth Management client deposits with the Bank, for which Wealth Management earns a deposit earnings credit, and fees earned for Wealth Management sweep deposits. Net interest income increased in 2017 and 2016 primarily as a result of growth in Wealth Management client deposits, including sweep deposits.

Wealth Management client deposits totaled $7.3 billion and $6.9 billion at December 31, 2017 and 2016, respectively, including sweep deposits. Wealth Management client deposits, including sweep accounts, averaged $7.1 billion, $6.0 billion and $3.7 billion in 2017, 2016 and 2015, 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. Net interest income as a percentage of the average deposits generated by Wealth Management represented 0.95% in 2017, compared to 1.00% in 2016 and 1.04% in 2015.

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 demonstrated by 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 3.13% in 2017, 3.20% in 2016 and 3.21% in 2015. Using this overall net interest margin and the average Wealth Management deposits for each year, the Wealth Management deposits, on a consolidated basis, contributed net interest income of approximately $221.8 million in 2017, $191.2 million in 2016 and $120.1 million in 2015.

Noninterest income for Wealth Management was $394.0 million for 2017, compared to $316.6 million for 2016 and $248.9 million for 2015, an increase of 24% in 2017 and an increase of 27% in 2016. The increases were primarily due to higher investment management fees. Fees and other revenues increased in 2017 and 2016 as a result of an increase in AUM and AUA due to the addition of new clients, the hiring of new wealth managers, who brought in additional clients, and market appreciation. In addition, beginning in the fourth quarter of 2015, fees were earned from assets acquired in the Constellation asset purchase.

Noninterest expense for Wealth Management was $350.3 million for 2017, compared to $284.5 million for 2016 and $223.2 million for 2015, an increase of 23% in 2017 and an increase of 27% in 2016. The increases in 2017 and 2016 were primarily due to higher salaries and benefits, including incentive compensation, as a result of overall growth in our business and the addition of new wealth managers. We continue to expand our client base and capabilities in all markets to grow this segment.

AUM and AUA in the Wealth Management segment, in aggregate, were $107.0 billion at December 31, 2017, compared to $83.6 billion a year ago, an increase of 28%. 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, including the ability to gather deposits, including sweep accounts. As described above, client deposits from Wealth Management generate net interest income for the Bank. Certain Wealth Management client assets that are held or managed by different areas within our Wealth Management business generate multiple revenue streams for the Bank. As a result of having these multiple revenue streams from certain client assets, such assets are included in more than one type of Wealth Management asset category in the table below. The following table presents the AUM and AUA by the entities comprising our Wealth Management segment:

($ in millions)	December 31, 2017	December 31, 2016
First Republic Investment Management	$ 52,712	$ 41,154
Brokerage and investment:		
Brokerage	43,015	32,218
Money market mutual funds	1,671	2,048
Total brokerage and investment	44,686	34,266
Trust Company:		
Trust	4,678	3,754
Custody	4,885	4,406
Total Trust Company	9,563	8,160
Total AUM and AUA	$ 106,961	$ 83,580

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.

($ in millions)	Year Ended December 31, 2017	2016	2015
AUM and AUA:			
Beginning balance	$ 83,580	$ 72,293	$ 53,377
Net client flow	11,000	7,617	11,620
Market appreciation (depreciation)	12,381	3,670	(1,261)
Constellation asset purchase	—	—	8,557
Ending balance	$ 106,961	$ 83,580	$ 72,293

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

	% of AUM	
	December 31,	
Investment Type	2017	2016
Equities	49%	45%
Fixed income	33%	33%
Alternative investments	14%	15%
Cash and cash equivalents	4%	7%
Total	100%	100%

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

	Year Ended December 31,		
	2017	2016	2015
First Republic Investment Management	0.60%	0.59%	0.60%
Brokerage and investment:			
Brokerage	0.07%	0.09%	0.09%
Money market mutual funds	0.42%	0.21%	0.01%
Total brokerage and investment	0.08%	0.10%	0.09%
Trust Company:			
Trust	0.23%	0.25%	0.21%
Custody	0.09%	0.10%	0.11%
Total Trust Company	0.15%	0.17%	0.16%
Total	0.34%	0.35%	0.35%

Balance Sheet Analysis

Investments

The following table presents the investment portfolio:

($ in thousands)	December 31, 2017	2016	2015
Available-for-sale:			
U.S. Treasury securities	$ 54,998	$ 111,029	$ 149,391
Agency residential MBS	34,574	48,229	640,105
Other residential MBS	4,860	7,662	10,511
Agency commercial MBS	2,255,890	1,790,897	2,062,679
Securities of U.S. states and political subdivisions—taxable	47,449	47,493	47,436
Mutual funds and marketable equity securities	20,317	1,948	679
Total	$ 2,418,088	$ 2,007,258	$ 2,910,801
Held-to-maturity:			
U.S. Government-sponsored agency securities	$ 1,400,025	$ 993,179	$ 817,125
Agency residential MBS	2,734,819	2,689,035	1,830,353
Other residential MBS	1,631	1,875	2,482
Agency commercial MBS	3,017,012	2,385,928	109,365
Securities of U.S. states and political subdivisions:			
Tax-exempt municipal securities	8,804,924	6,876,777	4,573,397
Tax-exempt nonprofit debentures	146,529	150,322	154,865
Taxable municipal securities	53,005	53,041	53,091
Total	$ 16,157,945	$ 13,150,157	$ 7,540,678

The total combined investment securities portfolio represented 21% of total assets at both December 31, 2017 and December 31, 2016, compared to 18% at December 31, 2015. During 2017, we continued to purchase securities considered HQLA, including agency commercial MBS, agency residential MBS and U.S. Government-sponsored agency securities. In addition, we continued purchasing tax-exempt municipal securities.

During 2016, the Bank performed a modest repositioning of some of its investment portfolio. The Bank sold some of its U.S. Treasury securities, agency residential MBS and agency commercial MBS for a total of $1.7 billion, from its available-for-sale portfolio. The Bank purchased some additional agency commercial MBS classified as held-to-maturity with the proceeds from the sale. In addition, as part of this repositioning, the Bank transferred $781.2 million of agency commercial MBS from the available-for-sale category to the held-to-maturity category. The transferred securities had a total unrealized gain (net of taxes) of $4.9 million in accumulated other comprehensive income on the date of transfer, which is being amortized into interest income over the remaining life of the securities.

The average duration of the available-for-sale portfolio was 1.3 years at December 31, 2017, compared to 1.8 years at December 31, 2016. The average duration of the held-to-maturity portfolio was 7.5 years at December 31, 2017, compared to 8.8 years at December 31, 2016.

At December 31, 2017, 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 $16.4 million. The tax-exempt nonprofit debentures are securities issued through state and local agencies where we have a banking relationship with nonprofit entities. The debentures are reviewed, approved and monitored by our business banking group, similar to business loans.

The following table presents the remaining contractual principal maturities of debt securities and contractual yields calculated on a taxable-equivalent basis at December 31, 2017. The weighted average yield is calculated using the amortized cost of debt securities. Actual maturities for certain U.S. Treasury securities, 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 obligations, with or without penalties, prior to contractual maturity.

			Contractual Principal—Remaining Maturity							
			Within 1 Year		After 1 Through 5 Years		After 5 Through 10 Years		After 10 Years	
($ in thousands)	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
Available-for-sale:										
U.S. Treasury securities	$ 54,998	0.78%	$ 54,998	0.78%	$ —	—%	$ —	—%	$ —	—%
Agency residential MBS	34,574	1.95%	26	2.10%	2,828	1.87%	5,858	1.65%	25,862	2.55%
Other residential MBS	4,860	3.08%	—	—%	—	—%	—	—%	4,860	3.08%
Agency commercial MBS	2,255,890	2.07%	—	—%	312,786	0.51%	1,179,350	1.68%	763,754	2.72%
Securities of U.S. states and political subdivisions—taxable	47,449	2.72%	—	—%	—	—%	—	—%	47,449	2.72%
Total carrying value of debt securities	$ 2,397,771		$ 55,024		$315,614		$1,185,208		$ 841,925	
Held-to-maturity:										
U.S. Government-sponsored agency securities	$ 1,400,025	2.83%	$ —	—%	$ —	—%	$ 398,154	2.81%	$ 1,001,871	2.84%
Agency residential MBS	2,734,819	2.74%	—	—%	—	—%	3,910	0.37%	2,730,909	2.74%
Other residential MBS	1,631	3.21%	—	—%	—	—%	—	—%	1,631	3.21%
Agency commercial MBS	3,017,012	2.67%	—	—%	—	—%	—	—%	3,017,012	2.67%
Securities of U.S. states and political subdivisions:										
Tax-exempt municipal securities	8,804,924	5.68%	160,597	6.62%	699,546	6.85%	169,829	6.71%	7,774,952	5.54%
Tax-exempt nonprofit debentures	146,529	5.73%	—	—%	—	—%	—	—%	146,529	5.73%
Taxable municipal securities	53,005	6.35%	—	—%	—	—%	—	—%	53,005	6.35%
Total carrying value of debt securities	$16,157,945		$160,597		$699,546		$ 571,893		$14,725,909	
Estimated fair value of debt securities	$16,502,745		$162,994		$741,423		$ 582,245		$15,016,083	

Loan Portfolio

The following table presents the recorded investment in the Bank's loan portfolio and allowance for loan losses:

($ in millions)	December 31, 2017	2016	2015	2014	2013
Single family (1-4 units)	$31,508	$26,267	$23,088	$20,455	$19,790
Home equity lines of credit	2,736	2,635	2,378	2,214	1,958
Multifamily (5+ units)	8,640	6,676	5,355	4,669	3,996
Commercial real estate	6,083	5,465	4,436	3,785	3,373
Single family construction	591	495	434	425	288
Multifamily/commercial construction	1,117	919	687	449	274
Total real estate mortgages	50,675	42,457	36,378	31,997	29,679
Business	8,295	6,872	6,217	4,858	3,560
Stock secured	1,084	823	522	286	164
Other secured	1,015	724	542	437	397
Unsecured	1,771	1,132	424	231	201
Total other loans	12,165	9,551	7,705	5,812	4,322
Total loans	62,840	52,008	44,083	37,809	34,001
Less:					
Allowance for loan losses	(366)	(306)	(261)	(207)	(153)
Loans, net	62,474	51,702	43,822	37,602	33,848
Single family loans held for sale	88	407	49	271	59
Total	$62,562	$52,109	$43,871	$37,873	$33,907

The following table presents an analysis of the recorded investment in our loan portfolio at December 31, 2017, including single family loans held for sale, by category and 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	%
Single family (1-4 units)	$12,500	$ 7,417	$ 5,189	$3,070	$ 922	$307	$2,191	$31,596	51%
Home equity lines of credit	1,110	555	477	310	74	17	193	2,736	4%
Multifamily (5+ units)	4,094	1,747	1,248	209	638	168	536	8,640	13%
Commercial real estate	2,635	1,272	984	261	153	156	622	6,083	10%
Business	3,243	1,749	1,518	600	285	24	876	8,295	13%
Construction	501	278	508	68	90	22	241	1,708	3%
Stock and other secured	476	543	246	258	26	2	548	2,099	3%
Unsecured	449	468	424	185	75	20	150	1,771	3%
Total	$25,008	$14,029	$10,594	$4,961	$2,263	$716	$5,357	$62,928	100%
% by location at December 31, 2017	40%	22%	17%	8%	4%	1%	8%	100%	
% by location at December 31, 2016	42%	21%	16%	8%	4%	1%	8%	100%	

At December 31, 2017 and 2016, approximately 51% and 52%, respectively, of total loans (based on recorded investment) were secured by real estate properties located in California. Future economic, political, natural disasters or other developments in California could adversely affect the value of real estate secured mortgage loans.

Recent wildfires and mudslides in the Northern California and Southern California regions affected certain of our borrowers. The Bank has currently identified loans with aggregate unpaid principal balances of approximately $70 million, primarily consisting of single family real estate secured loans, which have experienced damage to the underlying collateral as a result of the fires or mudslides. Such damage is generally insured, therefore, we do not expect material losses related to these loans. Our conservative underwriting practices, including low loan-to-value ratios, and the requirement for borrowers and property owners to maintain property insurance and other insurance coverage, as applicable, reduce our exposure to losses. We continue to monitor and assess the impact of these events on our borrowers.

The following table presents the maturity distribution (based on unpaid principal balance) of our real estate construction loans and other non-mortgage loans as of December 31, 2017. The maturity dates were determined based on the remaining scheduled principal repayment dates, without consideration of prepayments.

($ in thousands)	1 Year or Less	>1 Through 5 Years	>5 Years	Total
Maturity distribution:				
Business	$ 3,219,809	$ 1,303,529	$ 3,784,707	$ 8,308,045
Real estate construction	981,918	736,200	1,302	1,719,420
Stock secured	1,015,230	66,009	888	1,082,127
Other secured	146,125	565,619	302,862	1,014,606
Unsecured	271,763	233,001	1,263,918	1,768,682
Total	$ 5,634,845	$ 2,904,358	$ 5,353,677	$ 13,892,880

The following table presents the distribution (based on unpaid principal balance) of our real estate construction loans and other non-mortgage loans outstanding as of December 31, 2017 that are due after one year between fixed and adjustable interest rates:

($ in thousands)	Fixed	Adjustable	Total
Business	$ 3,995,421	$ 1,092,815	$ 5,088,236
Real estate construction	458,571	278,931	737,502
Stock secured	9,881	57,016	66,897
Other secured	112,466	756,015	868,481
Unsecured	1,440,722	56,197	1,496,919
Total	$ 6,017,061	$ 2,240,974	$ 8,258,035

The Bank's loan portfolio includes: (1) adjustable-rate loans tied to Prime, London Interbank Offered Rate ("LIBOR"), the Eleventh District Cost of Funds Index ("COFI"), and other rates such as 1-year Constant Maturity Treasury ("CMT"), which are currently adjustable; (2) hybrid-rate loans, for which the initial rate is fixed for a period from one year to as much as ten years; and (3) fixed-rate loans, for which the interest rate does not change through the life of the loan. The following table presents the recorded investment in our loan portfolio at December 31, 2017, including single family loans held for sale, by rate type:

	Adjustable Rate							
($ in millions)	Prime	LIBOR	COFI	Other	Total	Hybrid Rate	Fixed Rate	Total
Single family (1-4 units)	$ 228	$2,900	$3,136	$87	$ 6,351	$22,338	$ 2,907	$31,596
Home equity lines of credit	2,722	2	—	—	2,724	—	12	2,736
Multifamily (5+ units)	312	424	2,058	8	2,802	3,855	1,983	8,640
Commercial real estate	209	388	529	—	1,126	2,325	2,632	6,083
Business	2,932	1,215	14	—	4,161	249	3,885	8,295
Construction	530	133	—	—	663	18	1,027	1,708
Stock and other secured	518	1,445	—	—	1,963	8	128	2,099
Unsecured	232	75	—	—	307	—	1,464	1,771
Total	$7,683	$6,582	$5,737	$95	$20,097	$28,793	$14,038	$62,928
% by rate type at December 31, 2017	12%	11%	9%	0%	32%	46%	22%	100%
% by rate type at December 31, 2016	13%	12%	9%	0%	34%	45%	21%	100%

At December 31, 2017, included in the hybrid-rate and fixed-rate loan portfolios are $2.2 billion, or 3% of the total loan portfolio, that either (1) mature within one year; (2) are within one year of adjusting from the initial fixed-rate period; or (3) are committed for sale.

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 have required substantial borrower net worth, substantial post-loan liquidity, excellent credit scores and significant down payments. As part of our underwriting standards, we verify the ability of the borrowers to repay our loans. At December 31, 2017, approximately $21.8 billion, or 69%, of the unpaid principal balance of our single family loan portfolio, including loans held for sale, fully and evenly amortize until maturity following an initial interest-only period of generally ten years. Such loans were $18.8 billion, or 71%, of our single family loan portfolio, at December 31, 2016. At December 31, 2017, loans of this type had a weighted average LTV of approximately 57%, based on appraised value at the time of origination, and had credit scores averaging 760 at origination. At December 31, 2017, interest-only home loans with an LTV at origination of more than 80% comprised less than 1% of the unpaid principal balance of our single family loan portfolio, including loans held for sale.

The following table presents the years in which amortization begins for single family loans, including loans held for sale:

($ in thousands)	December 31, 2017 Unpaid Principal Balance
Currently amortizing	$ 9,702,894
Amortization period starts in:	
2018	506,695
2019	383,357
2020	546,467
2021	642,289
2022	1,244,926
2023 and thereafter	18,492,779
Total	$ 31,519,407

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

($ in thousands)	December 31, 2017	
	Unpaid Principal Balance	% of Total
LTV at Origination		
Less than or equal to 60%	$ 16,095,009	51.1%
Greater than 60% to 70%	10,538,219	33.4%
Greater than 70% to 80%	4,767,316	15.1%
Greater than 80%	118,863	0.4%
Total	$ 31,519,407	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 762, and all of our home loans were underwritten using full documentation.

HELOCs

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

For HELOCs that are in second lien position, the LTVs in the table below are presented on a combined LTV ("CLTV") basis, including the total HELOC commitment and any balance on a first residential mortgage. As of December 31, 2017, approximately 37% of HELOCs are in first lien position, and approximately 48% of HELOCs are in second lien position behind a first residential mortgage originated by us, including loans subsequently sold to investors. The following table presents CLTV information at origination for HELOCs, including both the unpaid principal balance and total commitment:

	December 31, 2017		
($ in thousands)	Unpaid Principal Balance	Total Commitment	% of Unpaid Principal Balance
CLTV at Origination			
Less than or equal to 60%	$ 1,674,065	$ 4,833,008	61.5%
Greater than 60% to 70%	767,317	1,908,357	28.2%
Greater than 70% to 80%	274,853	646,887	10.1%
Greater than 80%	5,942	10,866	0.2%
Total	$ 2,722,177	$ 7,399,118	100.0%

The following table presents the years in which amortization begins on our HELOC portfolio:

	December 31, 2017	
($ in thousands)	Unpaid Principal Balance	Total Commitment
Currently amortizing	$ 82,159	$ 87,707
Amortization period starts in:		
2018	185,840	322,590
2019	92,229	240,360
2020	80,698	242,015
2021	94,079	300,013
2022	150,694	489,478
2023 and thereafter	2,036,478	5,716,955
Total	$ 2,722,177	$ 7,399,118

Multifamily

At December 31, 2017 and 2016, the unpaid principal balance of multifamily loans was $8.7 billion and $6.7 billion, respectively. At December 31, 2017 and 2016, included in this portfolio were $3.7 billion and $2.7 billion, respectively, of loans 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. At December 31, 2017, for multifamily loans that allow for interest-only payments, the weighted average LTV was 51% based on the appraised value at the time of origination. Additionally, at December 31, 2017 and 2016, we had committed to lend $274.4 million and $279.0 million, respectively, under lines of credit secured by the equity in multifamily real estate. The unpaid principal balance related to these commitments at December 31, 2017 and 2016 was $146.2 million and $98.2 million, respectively, representing 1.7% and 1.5% of the portfolio at December 31, 2017 and 2016, respectively; these lines of credit also allow for interest-only payments for an initial period.

Commercial Real Estate

At December 31, 2017 and 2016, the unpaid principal balance of commercial real estate loans was $6.1 billion and $5.5 billion, respectively. At December 31, 2017 and 2016, included in this portfolio were $1.7 billion and $1.5 billion, respectively, of loans 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. At December 31, 2017, for commercial real estate loans that allow for interest-only payments, the weighted average LTV was 44% based on the appraised value at the time of origination. Additionally, at December 31, 2017 and 2016, we had committed to lend $230.5 million and $272.1 million, respectively, under lines of credit secured by the equity in commercial real estate. The unpaid principal balance related to these commitments at December 31, 2017 and 2016 was $124.3 million and $102.3 million, respectively, representing 2.0% of the portfolio at December 31, 2017, compared to 1.9% at December 31, 2016; these lines of credit also allow for interest-only payments for an initial period.

Business

Business loans provide funding for investment opportunities, bridge capital calls from investors, and meet the working capital cash flow requirements and various other financing needs of our business and non-profit clients. The business loan portfolio is comprised primarily of capital call lines to private equity and venture capital funds, and loans to independent schools and other non-profit organizations, which include social service organizations, the performing arts, museums, historical societies and community foundations. In addition, we provide operating lines of credit and term loans to other business clients to meet their working capital needs. The following table presents the recorded investment and total commitment for business loans by type:

	December 31,			
	2017		2016	
($ in thousands)	Recorded Investment	Total Commitment	Recorded Investment	Total Commitment
Private Equity/Venture Capital Funds	$ 2,836,888	$ 8,519,497	$ 2,097,176	$ 6,903,350
Schools/Non-profit Organizations	3,060,495	3,819,705	2,617,688	3,271,435
Investment Firms	421,116	852,009	441,335	1,010,082
Entertainment Industry	422,129	774,278	340,236	692,474
Real Estate Related Entities	362,882	725,758	343,658	693,183
Professional Service Firms	208,302	418,690	199,647	404,438
Aviation/Marine	283,545	290,123	268,484	275,920
Vineyards/Wine	175,387	225,522	148,925	198,491
Clubs and Membership Organizations	161,479	230,533	160,117	202,832
Other	363,001	608,204	255,061	488,611
Total	$ 8,295,224	$ 16,464,319	$ 6,872,327	$ 14,140,816

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

	Lines of Credit					
	December 31,					
	2017			2016		
($ in thousands)	Unpaid Principal Balance	Total Commitment	Utilization Percentage	Unpaid Principal Balance	Total Commitment	Utilization Percentage
Private Equity/Venture Capital Funds	$ 2,693,645	$ 8,372,799	32.2%	$ 1,946,118	$ 6,750,505	28.8%
Schools/Non-profit Organizations	403,937	1,160,455	34.8%	172,970	823,147	21.0%
Entertainment Industry	423,731	774,118	54.7%	340,691	691,108	49.3%
Investment Firms	209,186	639,669	32.7%	271,169	839,390	32.3%
Real Estate Related Entities	219,434	580,668	37.8%	193,100	540,186	35.7%
Professional Service Firms	79,008	288,040	27.4%	74,048	277,723	26.7%
Vineyards/Wine	41,923	91,637	45.7%	40,771	89,938	45.3%
Clubs and Membership Organizations	17,935	86,673	20.7%	8,721	51,033	17.1%
Aviation/Marine	60	6,170	1.0%	4,264	10,910	39.1%
Other	164,865	407,149	40.5%	99,304	331,216	30.0%
Total	$ 4,253,724	$ 12,407,378	34.3%	$ 3,151,156	$10,405,156	30.3%

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

	Term Loans Unpaid Principal Balance	
	December 31,	
($ in thousands)	2017	2016
Schools/Non-profit Organizations	$ 2,659,250	$ 2,448,288
Aviation/Marine	283,953	265,010
Investment Firms	212,340	170,691
Clubs and Membership Organizations	143,860	151,798
Private Equity/Venture Capital Funds	146,698	152,845
Professional Service Firms	130,650	126,716
Vineyards/Wine	133,885	108,554
Real Estate Related Entities	145,090	152,998
Entertainment Industry	160	1,365
Other	201,055	157,395
Total	$ 4,056,941	$ 3,735,660

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. At December 31, 2017, approximately 35% of our total loans, including loans held for sale, were currently adjustable and reprice with indices or mature within one year. Some single family loans are originated for sale in the secondary market. From the inception of our predecessor institution in mid-1985 through December 31, 2017, we have originated approximately $198 billion of loans, of which approximately $33 billion have been sold to investors.

Total loan originations were $27.6 billion in 2017, compared to $25.7 billion in 2016 and $19.7 billion in 2015, an increase of 7% in 2017 and an increase of 31% in 2016. Loans originated increased during 2017 due to increases in single family, multifamily and business lending. Loans originated increased during 2016 due to an increase in originations of single family loans and multifamily loans. The volume and type of loan originations depend on the level of interest rates, the demand for home loans in our markets and other economic conditions.

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

($ in thousands)	Year Ended December 31, 2017	2016	2015
Single family (1-4 units)	$ 11,568,111	$ 10,615,621	$ 7,633,653
Home equity lines of credit	1,731,988	1,815,252	1,575,262
Multifamily (5+ units)	2,703,242	2,542,551	1,461,123
Commercial real estate	1,263,776	1,354,527	1,344,072
Construction	1,480,957	1,342,404	1,291,902
Business	6,252,983	5,572,410	5,138,716
Stock and other secured	1,587,393	1,401,559	808,567
Unsecured	1,044,769	1,076,550	418,667
Total loans originated	$ 27,633,219	$ 25,720,874	$ 19,671,962

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

LTVs for New Originations	Year Ended December 31, 2017	2016	2015
Single family (1-4 units)	58%	55%	57%
Home equity lines of credit [1]	50%	52%	52%
Multifamily (5+ units)	50%	49%	52%
Commercial real estate	47%	48%	46%
Construction	56%	53%	54%

(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 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.

Weighted Average Credit Scores	Year Ended December 31, 2017	2016	2015
Single family (1-4 units)	764	764	761
Home equity lines of credit	766	766	767

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:

Purchase and Refinance Composition	Year Ended December 31, 2017	2016	2015
Purchase loans	46%	42%	50%
Refinance loans	54%	58%	50%
Total	100%	100%	100%

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	December 31, 2017	2016
Single family (1-4 units) (1)	58%	58%
Home equity lines of credit (2)	52%	53%
Multifamily (5+ units)	52%	53%
Commercial real estate	48%	49%
Construction	55%	54%

(1) Including loans held for sale.
(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. If interest rates rise, payments on ARMs increase, which may be financially burdensome to some borrowers and could increase the risk of default. Subject to market conditions, our ARMs generally provide for a life cap that is 5% to 9% above the initial interest rate, thereby protecting borrowers from unlimited interest rate increases. As part of our standard underwriting guidelines, borrowers undergo a qualification process for an ARM loan assuming an interest rate that is higher than the initial rate.

Asset Quality

We place an asset on nonaccrual status when any installment of principal or interest is 90 days or more past due (except for single family loans that are well secured and in the process of collection) or when management determines the ultimate collection of all contractually due principal or interest to be unlikely. Restructured loans for which we grant payment or significant interest rate concessions ("troubled debt restructurings") are placed on nonaccrual status until collectibility improves and a satisfactory payment history is established, generally by the receipt of at least six consecutive timely payments.

Our collection policies are highly focused with respect to both our portfolio loans and loans serviced for others. We have policies requiring rapid notification of delinquency and the prompt initiation of collection actions. Our practice is to attempt to resolve problem assets quickly, including the aggressive pursuit of foreclosure, other workout procedures 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 and have not needed to suspend any of our foreclosure activities.

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

	December 31,				
($ in thousands)	2017	2016	2015	2014	2013
Nonaccrual loans:					
Single family (1-4 units)	$16,897	$24,560	$21,330	$19,478	$23,994
Home equity lines of credit	8,585	10,464	11,211	15,126	12,568
Multifamily (5+ units)	4,651	4,516	8,690	851	2,501
Commercial real estate	286	306	5,519	5,791	7,753
Single family construction	—	—	—	—	3,448
Multifamily/commercial construction	—	—	11,600	—	—
Business	5,765	8,728	14,726	4,301	4,021
Unsecured	1,472	446	469	415	207
Total nonaccrual loans	37,656	49,020	73,545	45,962	54,492
Other real estate owned	—	—	—	—	3,200
Total nonperforming assets	$37,656	$49,020	$73,545	$45,962	$57,692
Nonperforming assets to total assets	0.04%	0.07%	0.12%	0.10%	0.14%
Restructured accruing loans	$12,605	$14,278	$14,043	$16,252	$19,984
Accruing loans 90 days or more past due	$ —	$ —	$ 4,199	$ 4,380	$ —

See Note 3 in Item 8. Financial Statements and Supplementary Data for information related to interest income on nonaccrual loans for the years ended December 31, 2017 and 2016.

Of the loans on nonaccrual status, at December 31, 2017, approximately $21.5 million were current, compared to $29.0 million at December 31, 2016.

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

Allowance for Loan Losses

We establish an allowance for loan losses for the inherent risk of probable losses, based upon established criteria, including the type of loan, loan characteristics, our and the industry's historical loss experience, and economic trends. Our allowance for loan losses is adjusted quarterly to maintain a level estimated by management to be appropriate to provide for losses that can be reasonably anticipated based upon specific conditions at the time. Our allowance for loan losses methodology, including allocation to specific loans and between the loan portfolio categories, requires management's consideration of a number of factors.

We evaluate any allowance for loan losses that would be required on acquired loans, which were recorded at fair value on the acquisition date, by evaluating whether the loans had experienced a deterioration in credit such as a decline in the fair value of the underlying collateral, the worsening of a borrower's financial condition, or a delinquency in payment. If the loan had experienced a credit deterioration, we provide an allowance by comparing any reserve required to the basis in the loans. In addition, we provide for any loan losses associated with new loan originations based upon our assessment of credit losses inherent in the portfolio.

We also maintain a qualitative reserve, which represents the qualitative portion of the allowance for loan losses. This qualitative reserve is determined based on management's assessments of the risks that may lead to a loan loss experience different than our historical loss experience and therefore not reflected in the quantitative model. We use qualitative factors that are intended to address developing external and internal environmental trends and include considerations such as changes in current economic and business conditions, the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, along with other external factors, such as competition and the legal and regulatory environment.

The provision for loan losses is related primarily to growth in loans outstanding and reflects management's continuing assessment of the credit quality of the Bank's loan portfolio and our overall allowance methodology, which considers, among other things, the Bank's loan growth, level and type of loans originated and trends in the Bank's markets.

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

	At or for the Year Ended December 31,				
($ in thousands)	**2017**	**2016**	**2015**	**2014**	**2013**
Allowance for loan losses:					
Balance at beginning of period	$ 306,398	$ 261,058	$ 207,342	$ 153,005	$ 129,889
Provision	60,181	47,192	55,439	56,486	36,969
Charge-offs:					
Single family (1-4 units)	(1,176)	(1,694)	(146)	(259)	(153)
Home equity lines of credit	(848)	(272)	(1,632)	(1,715)	(1,076)
Multifamily (5+ units)	—	—	—	—	—
Commercial real estate	—	—	—	—	—
Single family construction	—	—	—	—	—
Multifamily/commercial construction	—	—	—	—	—
Business	(616)	(93)	(95)	(797)	(12,157)
Stock secured	—	—	—	—	—
Other secured	—	—	—	—	—
Unsecured	(346)	(57)	(169)	(233)	(993)
Total charge-offs	(2,986)	(2,116)	(2,042)	(3,004)	(14,379)
Recoveries:					
Single family (1-4 units)	30	15	89	180	22
Home equity lines of credit	2,167	103	49	189	42
Multifamily (5+ units)	—	—	—	1	—
Commercial real estate	—	—	—	—	—
Single family construction	—	—	—	—	—
Multifamily/commercial construction	—	—	—	—	—
Business	47	117	50	342	31
Stock secured	—	—	—	—	—
Other secured	—	—	—	—	—
Unsecured	95	29	131	143	431
Total recoveries	2,339	264	319	855	526
Net loan charge-offs	(647)	(1,852)	(1,723)	(2,149)	(13,853)
Balance at end of period	$ 365,932	$ 306,398	$ 261,058	$ 207,342	$ 153,005
Average total loans for the period	$56,864,796	$47,508,150	$40,640,098	$35,579,839	$30,369,778
Total loans at period end	$62,840,215	$52,008,317	$44,083,569	$37,808,369	$34,000,548
Total nonaccrual loans	$ 37,656	$ 49,020	$ 73,545	$ 45,962	$ 54,492
Ratios:					
Net charge-offs to:					
Average total loans	0.00%	0.00%	0.00%	0.01%	0.05%
Allowance for loan losses to:					
Total loans	0.58%	0.59%	0.59%	0.55%	0.45%
Nonaccrual loans	971.8%	625.0%	355.0%	451.1%	280.8%

The following tables present management's historical allocation of the allowance for loan losses by loan category to specific loans in those categories as a result of our loan review process at the dates indicated:

	December 31,					
	2017		2016		2015	
($ in thousands)	Amount	% of Loan Portfolio	Amount	% of Loan Portfolio	Amount	% of Loan Portfolio
Allocation of allowance for loan losses:						
Single family (1-4 units) and home equity lines of credit	$ 65,057	54%	$ 52,870	55%	$ 33,144	58%
Multifamily (5+ units)	67,605	14%	53,373	13%	25,416	12%
Commercial real estate	52,268	10%	48,880	11%	24,690	10%
Construction	13,271	3%	10,935	3%	4,862	3%
Business	137,956	13%	118,874	13%	92,568	14%
Stock secured	6,596	2%	5,102	2%	1,809	1%
Other secured	7,850	1%	5,822	1%	6,610	1%
Unsecured	15,329	3%	10,542	2%	6,918	1%
Unallocated [(1)]	—	—%	—	—%	65,041	—%
Total	$365,932	100%	$306,398	100%	$261,058	100%

(1) As of December 31, 2017 and 2016, the unallocated qualitative reserve was allocated to the individual loan portfolios.

	December 31,			
	2014		2013	
($ in thousands)	Amount	% of Loan Portfolio	Amount	% of Loan Portfolio
Allocation of allowance for loan losses:				
Single family (1-4 units) and home equity lines of credit	$ 30,199	60%	$ 28,485	64%
Multifamily (5+ units)	21,800	12%	18,410	12%
Commercial real estate	19,891	10%	16,314	10%
Construction	3,559	2%	2,165	2%
Business	71,805	13%	52,197	10%
Stock secured	984	1%	557	—%
Other secured	5,081	1%	4,511	1%
Unsecured	4,145	1%	2,681	1%
Unallocated [(1)]	49,878	—%	27,685	—%
Total	$207,342	100%	$153,005	100%

(1) As of December 31, 2017 and 2016, the unallocated qualitative reserve was allocated to the individual loan portfolios.

Mortgage Banking Activities

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

The amount of loans sold depends upon conditions in both the mortgage origination and secondary loan sales markets as well as our asset/liability management strategy. The following table presents information on single family loans originated, loans sold and gain on sale of loans:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Single family loans originated	$11,568,111	$10,615,621	$7,633,653
Loans sold:			
Flow sales:			
Agency	$ 131,111	$ 434,094	$ 273,128
Non-agency	309,482	323,454	402,300
Total flow sales	440,593	757,548	675,428
Bulk sales:			
Non-agency	2,436,584	2,389,879	1,753,832
Total loans sold	$ 2,877,177	$ 3,147,427	$2,429,260
Gain on sale of loans:			
Amount	$ 9,233	$ 4,828	$ 9,725
Gain as a percentage of loans sold	0.32%	0.15%	0.40%

The higher level of gain on sale of loans in 2017 was primarily the result of higher margins, partially offset by a lower volume of loans sold. The lower level of gain on sale of loans in 2016 was primarily the result of lower margins, partially offset by a higher volume of loans sold. The level of future loan originations, loan sales and loan repayments depends 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. The amount of gain or loss on the sale of loans is primarily driven by market conditions and changes in interest rates, as well as our pricing and asset/liability management strategies.

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 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.

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

($ in thousands)	At or for the Year Ended December 31, 2017	2016	2015
Loans serviced for others	$12,495,321	$11,655,453	$10,531,418
Loan servicing fees, net	$ 13,800	$ 13,465	$ 13,040

Mortgage loans serviced for investors increased to $12.5 billion at December 31, 2017, from $11.7 billion at December 31, 2016, due to loan sales exceeding repayments in the servicing portfolio over the past twelve months. MSRs are recognized as separate assets on our balance sheet and are reported at the lower of amortized cost or fair value. At December 31, 2017, MSRs were $66.1 million (53 basis points of loans serviced), compared to $62.4 million (54 basis points of loans serviced) at December 31, 2016.

Our loan origination policies and consistent underwriting standards have resulted in a low historical loan loss experience on single family loans sold in the secondary market. Since our inception in 1985, we have experienced cumulative net loan losses of only $9.0 million on single family loans sold. At December 31, 2017, single family loans serviced for investors that are 90 days or more past due were $5.2 million, or 4 basis points of such loans serviced.

Deposit Gathering

We obtain funds from depositors by offering consumer and business checking, money market and passbook accounts, and term CDs. Our accounts are federally insured by the FDIC up to the maximum limit. At December 31, 2017, our total deposits were $68.9 billion, an 18% increase from $58.6 billion at December 31, 2016, as we continued to expand relationships with existing clients and acquire new deposit clients, both business and consumer. The following table presents the balances and average contractual cost of deposits:

	December 31,					
	2017		2016		2015	
($ in thousands)	Amount	Weighted Ave. Cost	Amount	Weighted Ave. Cost	Amount	Weighted Ave. Cost
Checking	$43,680,014	0.04%	$37,316,193	0.01%	$30,279,370	0.01%
Money market checking	9,251,504	0.52%	7,969,787	0.13%	5,756,821	0.05%
Money market savings and passbooks	8,752,396	0.30%	8,203,340	0.09%	7,270,396	0.08%
CDs	7,234,794	1.37%	5,113,061	1.20%	4,586,878	1.21%
Total	$68,918,708	0.28%	$58,602,381	0.14%	$47,893,465	0.14%

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 $65.4 billion and $55.9 billion at December 31, 2017 and 2016, respectively, and represented 95% of total deposits at both December 31, 2017 and 2016.

The following table presents deposits by region in which the accounts are domiciled. Our retail locations that gather deposits are designated as "Preferred Banking Offices."

($ in thousands)	December 31, 2017	December 31, 2016
Preferred Banking Offices		
Northern California	$13,249,754	$10,943,394
Metropolitan New York	5,555,605	4,380,991
Southern California	3,071,237	2,474,720
Boston	1,384,166	1,110,158
Subtotal	23,260,762	18,909,263
Preferred Banking		
Northern California	17,001,723	14,102,877
Metropolitan New York	10,334,686	8,982,844
Southern California	5,810,717	5,046,821
Boston	6,754,505	5,688,979
Subtotal	39,901,631	33,821,521
Wealth management sweep	4,446,808	4,965,145
Other	1,309,507	906,452
Total deposits	$68,918,708	$58,602,381

Overall, deposits in our Preferred Banking Offices grew 23% since December 31, 2016, with growth driven by consumer and business checking accounts as well as CDs. This increase is due to growth of existing client relationships, client referrals, our general marketing initiatives, growth in services offered to Bank clients and the service skills of individual employees.

Preferred Banking deposits grew 18% since December 31, 2016, mostly in business and consumer checking as well as business money market checking. Generally, Preferred Banking deposits are placed by clients who are introduced to us through lending activities or wealth management activities or who entered into deposit relationships directly with a relationship manager, business banker, preferred banker or wealth management professional.

Wealth management sweep deposits consist primarily of balances swept from a client's brokerage or other investment account into a deposit account at the Bank. Other deposits consist primarily of institutional and operational deposits not attributable to any specific deposit location. The increase in other deposits was primarily due to the growth in institutional deposits. Wealth management sweep deposits declined 10% since December 31, 2016 due to wealth management clients electing other investment alternatives instead of maintaining cash in a brokerage or investment account.

The following table presents consumer and business deposits:

($ in thousands)	December 31, 2017	December 31, 2016
Consumer deposits:		
Checking	$15,558,482	$13,210,132
Money market checking	3,493,205	3,964,624
Money market savings and passbooks	5,714,458	5,714,016
CDs	6,768,422	4,696,756
	31,534,567	27,585,528
Business deposits:		
Checking	28,121,532	24,106,060
Money market checking	5,758,299	4,005,163
Money market savings	3,037,938	2,489,325
CDs	466,372	416,305
	37,384,141	31,016,853
Total	$68,918,708	$58,602,381

We fund a portion of our assets with CDs that have balances greater than $250,000 and that have maturities generally in excess of six months. At December 31, 2017 and 2016, our CDs having balances greater than $250,000 totaled $3.5 billion and $2.2 billion, respectively. The following table presents the maturities of our CDs greater than $250,000 in size:

($ in thousands)	December 31, 2017 Greater than $250,000
Remaining maturity:	
Three months or less	$ 918,635
Over three through six months	1,037,200
Over six through twelve months	703,570
Over twelve months	811,461
Total	$3,470,866
Percent of total deposits	5%

At December 31, 2017 and 2016, the weighted average contractual rate paid on CDs was 1.37% and 1.20%, respectively, and the weighted average remaining maturity of CDs was 11.0 months and 15.2 months at the same respective period ends. The contractual maturities and weighted average contractual rate of our CDs were as follows:

	December 31, 2017	
($ in thousands)	**Amount**	**Rate**
Certificates of deposit maturing in:		
2018	4,881,327	1.15%
2019	1,569,819	1.68%
2020	459,724	2.13%
2021	157,855	1.96%
2022	104,945	2.15%
2023 and thereafter	61,124	2.28%
Total	$7,234,794	1.37%

Other Funding

Other sources of funding include federal funds purchased, securities sold under agreements to repurchase, short-term and long-term FHLB advances and unsecured, term, fixed-rate senior notes and subordinated notes. Short-term borrowings, which include federal funds purchased, short-term FHLB advances and securities sold under agreements to repurchase, have an original maturity of one year or less. Long-term FHLB advances, senior notes and subordinated notes have an original maturity in excess of one year.

FHLB Advances

As of December 31, 2017, we had short-term FHLB advances of $100.0 million.

Our long-term, laddered maturity, fixed-rate FHLB advances as of December 31, 2017 were $8.3 billion. The weighted average remaining maturity of long-term FHLB advances was 1.4 years at December 31, 2017.

The following table presents the contractual maturities and weighted average contractual rate of our long-term FHLB advances:

	December 31, 2017	
($ in thousands)	**Amount**	**Rate**
FHLB advances maturing in:		
2018	2,800,000	1.45%
2019	3,300,000	1.54%
2020	1,800,000	1.70%
2021	400,000	1.87%
2022	—	—%
Total	$8,300,000	1.56%

Senior Notes and Subordinated Notes

The following table presents the carrying values, coupon rates and maturity dates of the Bank's unsecured, term, fixed-rate senior notes and subordinated notes as of December 31, 2017:

	December 31, 2017		
($ in thousands)	**Carrying Value** [(1)]	**Rate**	**Maturity Date**
Senior notes:			
Fixed rate, issued June 2014	$398,770	2.375%	June 2019
Fixed rate, issued June 2017	$495,953	2.500%	June 2022
Subordinated notes:			
Fixed rate, issued August 2016	$387,590	4.375%	August 2046
Fixed rate, issued February 2017	$389,494	4.625%	February 2047

(1) Principal balance, net of unamortized issuance discounts and deferred issuance costs.

Available Borrowing Capacity

Our unused, available borrowing capacity at the FHLB and the Federal Reserve Bank discount window at December 31, 2017 was $19.2 billion and $8.2 billion, respectively. This available borrowing capacity is supported by already pledged loans at the FHLB and investment securities at the Federal Reserve Bank. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk—Interest Rate Risk Management" for additional information regarding our funding practices.

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 conditional commitments to originate loans, 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 commitments may expire without being drawn, the total commitment amounts do not necessarily represent future cash requirements. See Note 14 in "Item 8. Financial Statements and Supplementary Data" for additional information regarding the Bank's lending commitments.

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 and unfunded commitments on tax credit investments and other investments, are recorded as liabilities in the consolidated financial statements. The Bank also has obligations under operating leases for premises and equipment and agreements to purchase goods or services, which are off-balance sheet obligations.

The following table presents information regarding our significant contractual obligations at December 31, 2017, and expected settlement or maturity dates for these obligations. Deposit obligations categorized as "indeterminate maturity" include noninterest-bearing demand accounts, interest-bearing checking accounts, money market checking accounts, money market savings accounts and passbook accounts.

	Contractual Payments by Period					
($ in thousands)	Less Than 1 Year	1 to 3 Years	>3 to 5 Years	> 5 Years	Indeterminate Maturity	Total
Deposits	$4,881,327	$2,029,543	$262,800	$ 61,124	$61,683,914	$68,918,708
FHLB advances	2,900,000	5,100,000	400,000	—	—	8,400,000
Senior notes	—	398,770	495,953	—	—	894,723
Subordinated notes	—	—	—	777,084	—	777,084
Unfunded commitments—tax credit investments	217,872	161,860	11,223	40,177	—	431,132
Unfunded commitments—other investments	1,720	2,017	254	—	—	3,991
Operating leases, net of sublease income	77,597	165,422	139,873	294,985	—	677,877
Purchase obligations	$ 44,528	$ 38,367	$ 14,413	$ —	$ —	$ 97,308

See Notes 6, 8, 10 and 11 in "Item 8. Financial Statements and Supplementary Data" for additional information regarding the contractual obligations presented in the table above.

Liquidity

Liquidity refers to our capacity to meet our cash and collateral obligations and to manage both expected and unexpected cash flows without adversely impacting the operations or financial health of the Bank. Sources of liquidity include both unencumbered assets, such as marketable loans and securities, and traditional forms of funding, such as deposits, borrowings and equity. At December 31, 2017, our investment securities portfolio of $18.6 billion and cash and cash equivalents of $2.3 billion collectively comprised 24% of total assets. At December 31, 2017, assets that are considered HQLA, including eligible cash, increased to $10.5 billion, compared to $9.0 billion at December 31, 2016.

At December 31, 2017, we had $19.2 billion of available borrowing capacity at the FHLB supported by already pledged loans. In addition, we had $8.2 billion of available borrowing capacity at the Federal Reserve Bank discount window collateralized by already pledged investment securities. This unused, available borrowing capacity at the FHLB and the Federal Reserve Bank discount window equaled 31% of total assets.

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

During 2017, our loan originations, net of repayments, were $12.9 billion and our investment purchases, net of sales, calls and paydowns, were $3.2 billion. We also redeemed all of the outstanding shares of our 6.70% Noncumulative Perpetual Series A Preferred Stock and all of the outstanding shares of our 6.20% Noncumulative Perpetual Series B Preferred Stock, which totaled $349.5 million. These activities were primarily funded by a net increase in deposits of $10.3 billion, a net increase in FHLB borrowings of $2.5 billion and the sale of

$2.9 billion of loans. In addition, during 2017, we sold common stock in underwritten public offerings, which added $508.9 million to common equity, and also completed an underwritten public offering of noncumulative perpetual preferred stock, which added approximately $193.7 million to equity. During 2017, we also completed an underwritten public offering of unsecured subordinated notes of $400 million, with net proceeds of $389.3 million, and an underwritten public offering of unsecured senior notes of $500 million, with net proceeds of $495.4 million.

At December 31, 2017, we had $100.0 million in outstanding short-term FHLB advances. We primarily use these short-term borrowings to fund short-term assets, such as loans that have been committed for sale and floating rate investments, or to bridge temporary funding needs, such as those resulting from client investment activity or seasonal deposit fluctuations. At December 31, 2017, the Bank had loans held for sale of $87.7 million, which were committed to be delivered to investors in the first quarter of 2018.

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

Capital Resources

The following table represents the components of our regulatory capital under the transitional requirements of the Basel III Capital Rules in effect at the dates indicated:

	December 31,	
($ in thousands)	2017	2016
Shareholders' equity	$7,818,301	$ 6,908,652
CET1 capital adjustments and deductions:		
Preferred stock	(990,000)	(1,139,525)
Goodwill and other intangible assets, net of deferred taxes	(260,827)	(259,119)
Deferred tax assets that arise from tax credit carryforwards	(82,696)	(7,087)
Accumulated other comprehensive (income) loss	3,840	(6,339)
CET1 capital	6,488,618	5,496,582
Preferred stock	990,000	1,139,525
Additional Tier 1 capital deductions	(20,674)	(4,724)
Additional Tier 1 capital	969,326	1,134,801
Tier 1 capital	7,457,944	6,631,383
Tier 2 capital instruments—subordinated notes [1]	777,084	387,380
Qualifying allowance for loan losses [2]	380,132	318,898
Other Tier 2 qualifying instruments	229	64
Tier 2 capital	1,157,445	706,342
Total risk-based capital	$8,615,389	$ 7,337,725

(1) Subordinated notes mature in 2046 and 2047.
(2) Includes the reserve for unfunded commitments.

At December 31, 2017 and 2016, the Bank's noncumulative perpetual preferred stock was 13% and 17% of Tier 1 capital, respectively.

During 2017, we completed an underwritten public offering of $400 million of 30-year term, 4.625% fixed-rate, unsecured subordinated notes. The subordinated notes qualify as Tier 2 capital and increased total risk-based capital by $389.3 million.

During 2017, we completed underwritten public offerings of common stock, which added $508.9 million to common equity, and also completed an underwritten public offering of noncumulative perpetual preferred stock, which added $193.7 million to equity.

In addition, during 2017, we redeemed all of the outstanding shares of our 6.70% Noncumulative Perpetual Series A Preferred Stock and all of the outstanding shares of our 6.20% Noncumulative Perpetual Series B Preferred Stock, which totaled $349.5 million, plus accrued and unpaid dividends to the respective dates of redemption.

As described in "Item 1. Business—Supervision and Regulation—Capital Requirements," the rules under the Basel III framework became effective for the Bank on January 1, 2015. The Basel III Capital Rules introduced a capital measure referred to as Common Equity Tier 1 ("CET1") and a regulatory capital ratio of CET1 to risk-weighted assets. The Basel III Capital Rules also revised the definitions and components of required capital, and the approach for risk weighting assets.

The Basel III Capital Rules also introduced a "capital conservation buffer." The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a ratio of CET1 to risk-weighted assets 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. The implementation of the capital conservation buffer began on January 1, 2016 at 0.625% and will be phased in over a four-year period (increasing by that amount on each subsequent January 1, until it reaches 2.5% on January 1, 2019). Thus, when fully phased in on January 1, 2019, the Bank will be required to maintain this additional capital conservation buffer of 2.5% of risk-weighted assets.

Our capital ratios exceeded all applicable regulatory requirements at December 31, 2017 for well-capitalized institutions, and our capital conservation buffer of 6.11% exceeded both the transitional buffer of 1.25% and the fully phased-in minimum requirements of 2.5%. The following table presents our capital ratios under the transitional and fully phased-in requirements and the regulatory requirements under the Basel III Capital Rules:

	Actual (Transitional)	Fully Phased-in [1]	Actual (Transitional)	Regulatory Requirements		
($ in thousands)	December 31, 2017		December 31, 2016	Well-Capitalized Ratio	Minimum Capital Ratio	Minimum Capital Conservation Buffer [2]
Capital Ratios						
Tier 1 leverage ratio (Tier 1 capital to average assets)	8.85%	8.83%	9.37%	5.00%	4.00%	—%
CET1 capital to risk-weighted assets	10.63%	10.57%	10.83%	6.50%	4.50%	1.25%
Tier 1 capital to risk-weighted assets	12.22%	12.19%	13.07%	8.00%	6.00%	1.25%
Total capital to risk-weighted assets	14.11%	14.09%	14.46%	10.00%	8.00%	1.25%
Regulatory Capital [3]						
CET1 capital	$ 6,488,618	$ 6,449,589	$ 5,496,582			
Tier 1 capital	$ 7,457,944	$ 7,439,589	$ 6,631,383			
Total capital	$ 8,615,389	$ 8,597,034	$ 7,337,725			
Assets [3]						
Average assets	$84,238,404	$84,220,049	$70,779,188			
Risk-weighted assets	$61,054,077	$61,035,722	$50,744,017			

(1) Certain adjustments required under the Basel III Capital Rules will be phased in through the end of 2018. The ratios and amounts shown in this column are calculated assuming a fully phased-in basis of all such adjustments as if they were effective as of December 31, 2017.

(2) Beginning on January 1, 2016, a capital conservation buffer is required to be held by banking institutions. The minimum required capital conservation buffer is 1.25% in 2017 and is being phased in through January 1, 2019 when it reaches 2.5%. As of December 31, 2017, our capital conservation buffer was 6.11%, which exceeded both the transitional buffer of 1.25% and the fully phased-in minimum requirements of 2.5%.

(3) As defined by regulatory capital rules.

Note Regarding Non-GAAP Financial Measures

Our accounting and reporting policies conform to GAAP and the prevailing practices in the banking industry. Due to the application of purchase accounting from the Bank's re-establishment as an independent institution in July 2010, our management historically used certain non-GAAP (i.e., core) measures and ratios that excluded the impact of certain net purchase accounting items to evaluate our performance. However, as a result to the diminished impact of these positive purchase accounting items, beginning in the first quarter of 2017, we no longer present any non-GAAP financial measures.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk Management

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

We manage interest rate risk primarily by originating and retaining adjustable-rate loans and hybrid ARM loans with initial short- or intermediate-term fixed rates and funding these assets with checking and savings accounts, short- and intermediate-term CDs, long-term laddered maturity fixed-rate FHLB advances and unsecured, term, fixed-rate senior notes and subordinated notes. We may also utilize overnight and short-term borrowings to fund certain short-term assets, such as loans that have been committed for sale and floating rate investments, or to bridge temporary funding needs, such as those resulting from client investment activity or seasonal deposit fluctuations. As an active and ongoing part of our ALM strategy, we sell long-term fixed-rate single family mortgage loans into the secondary market through ongoing, or "flow," transactions. We also sell portions of our single family hybrid ARM and fixed-rate loans in bulk loan transactions or securitizations. We sold $2.9 billion of loans during 2017.

We have on occasion entered into various types of interest rate exchange agreements to better hedge our interest rate exposure in a way that changes in interest rates do not have a significant negative impact on net interest income. The last such agreement we entered into was in 2011. At December 31, 2017, we did not have any interest rate exchange agreements for hedging purposes.

In addition to the mix and pricing of earning assets and interest-bearing liabilities, our net interest income and net interest margin may also be affected by factors such as competition, conditions in loan markets, 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, level and cost of FHLB advances, market rates of new capital or debt offerings and any nonaccrual loans. Our net interest margin may also be affected by our overall business model or strategy.

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 earning assets and interest-bearing liabilities. The Bank has earning assets with reset periods or maturity of less than one year totaling $26.2 billion, or 31% of total earning assets at December 31, 2017. Of these earning assets, the Bank has loans, including loans held for sale, which are currently adjustable and reprice with indices or mature within one year totaling $22.3 billion, or 35% of the total loan portfolio at December 31, 2017. The loan portfolio that reprices at

least quarterly to market rate indices, such as Prime or LIBOR, totaled $14.2 billion, or 23% of the total loan portfolio at December 31, 2017. The loan portfolio with lagging indices, such as COFI and the CMT, totaled $5.9 billion, or 9% of the total loan portfolio at December 31, 2017. Additionally, the loan portfolio that either (1) matures within one year; (2) is within one year of adjusting from the initial fixed-rate period; or (3) is committed for sale totaled $2.2 billion, or 3% of the total loan portfolio at December 31, 2017. In addition, at December 31, 2017, the Bank held $1.9 billion in cash and $2.0 billion in investment securities (collectively, 19% of total cash and investment securities), that reprice to market rate indices at least quarterly.

Total checking deposits were $43.7 billion, or 63% of total deposits at December 31, 2017. Total checking deposits include both noninterest-bearing checking accounts and interest-bearing checking accounts, which currently pay a nominal rate of 4 basis points, but exclude money market checking accounts. We do not expect the rate paid on interest-bearing checking deposits to fluctuate much with changes in overall interest rates, consistent with our history. The rates paid on money market savings, money market checking and passbook deposit accounts generally move directionally with changes in short-term prevailing interest rates and may be subject to competitive pricing pressure. Money market savings, money market checking and passbook deposit accounts together totaled $18.0 billion, or 26% of total deposits at December 31, 2017. CDs were $7.2 billion, or 11% of total deposits and had a weighted average remaining maturity of 11.0 months at December 31, 2017.

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 $8.3 billion at December 31, 2017 with a weighted average maturity of 1.4 years. In addition, the Bank has also issued unsecured, term, fixed-rate senior notes and unsecured, term, fixed-rate subordinated notes. At December 31, 2017, the senior notes had a carrying value of $894.7 million and mature in June 2019 and June 2022. Also, at December 31, 2017, the subordinated notes had a carrying value of $777.1 million and mature in August 2046 and February 2047.

Net Interest Income Simulation

In addition to evaluating our current balance sheet, we also perform net interest income simulations to measure and evaluate our potential exposure to changes in interest rates. Based on the results of such analyses, we may decide to make changes in our asset/liability mix, to draw down longer-term advances with the FHLB, to issue long-term senior notes or long-term subordinated notes, to sell 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 potential changes in our net interest income. 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 characteristics, other than contractual, for market rate sensitive instruments, (4) non-interest checking deposit balance behavior and the possibility of shifts in preference towards interest-bearing products, (5) varying sensitivities of financial instruments due to differing underlying rate indices, (6) loan prepayment speeds for different interest rate scenarios, (7) the effect of interest rate floors, periodic loan caps and lifetime loan caps, (8) the levels of cash held on our balance sheet and (9) overall growth, product mix and repayment rates of assets and liabilities. Because of limitations inherent in any approach used to measure interest rate risk, simulation results are not intended as a precise forecast of the actual effect of a change in market interest rates on our results, but rather as a means to better understand interest rate risk exposure and plan and execute the appropriate ALM strategies.

Potential changes to our contractual net interest income in hypothetical rising and declining rate scenarios, measured over a two-year period beginning December 31, 2017, are presented in the following table. The projections assume both (a) instantaneous parallel shifts upward of 100 and 200 basis points and instantaneous parallel shifts downward of the yield curve of 100 and 200 basis points occurring immediately ("Shock") and (b) gradual parallel shifts upward and downward of the yield curve in even increments over the first twelve months, followed by rates held constant thereafter ("Ramp"). In downward shifts of the yield curve, interest rates are not modeled to decline lower than 0%.

	Estimated Increase (Decrease) in Net Interest Income	
Change in Market Interest Rates	**Twelve Months Ending December 31, 2018**	**Twelve Months Ending December 31, 2019**
Shock:		
+200 basis points immediately	6.1%	8.8%
+100 basis points immediately	3.4%	4.9%
-100 basis points immediately	(5.8)%	(8.1)%
-200 basis points immediately	(14.1)%	(22.8)%
Ramp:		
+200 basis points over next 12 months	3.1%	6.5%
+100 basis points over next 12 months	1.9%	4.0%
-100 basis points over next 12 months	(2.4)%	(8.2)%
-200 basis points over next 12 months	(6.2)%	(20.1)%

As of December 31, 2017, the Bank is slightly asset sensitive, indicating that it would generally benefit from parallel increases in interest rates, given the positive variances in net interest income observed when we compare the two-year earnings simulation results in a rising rate scenarios to a scenario, in which rates remain unchanged. In a hypothetical rising rate environment, we benefit from adjustable-rate loans, which would begin to reprice upward with prevailing rates, adjustable-rate securities, certain fixed funding sources and modeled deposit balances and mix. In addition, in the second year, the greater asset sensitivity is driven by growth in the loan portfolio and new investment purchases both made at new market interest rates.

With respect to deposit balances, we expect non-interest bearing and interest-bearing checking balances, which exclude money market checking, to migrate from the current level of 63% of total deposits to approximately 60% of total deposits over the two-year horizon depicting a shift in preference by some account holders towards higher yielding deposit products in a rising rate environment. We expect the rate paid on these checking balances to remain nominal in a rising rate environment and consistent with our historical experience.

Excluding certificates of deposit, the remaining deposits include money market checking, money market savings and passbook accounts and are assumed to reprice by approximately 72% of the change in short-term interest rates over the two-year period, which is also consistent with our historical experience.

As part of our interest rate risk management process, we perform additional simulations and scenarios. For example, if the mix of checking deposits (excluding money market checking) to total deposits were to change gradually from 63% at December 31, 2017, to 50% of total deposits over a two-year period, the impact on net interest income from a +200 basis points ramp would be an increase of 2.8% in the second year, compared to 6.5% in the table above.

Inversely, in a hypothetical declining rate environment, in which interest rates decline lower than current levels, we experience an asymmetrical reduction in net interest income as variable funding sources, such as money market savings and checking deposits, reach natural floors while average yields on interest-earning assets continue to decline.

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, our net interest income might vary significantly. Non-parallel yield curve shifts, such as a flattening or steepening of the yield curve or changes in interest rate spreads, would also cause our net interest income to be different from that depicted. In a rising rate environment our net interest income could be lower than projected if deposits and other short-term liabilities reprice faster than expected or if a greater than expected portion of non-interest bearing deposits migrate to interest bearing deposits. 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 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 than those assumed in the simulation model.

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

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

FIRST REPUBLIC BANK
CONSOLIDATED BALANCE SHEETS

Item 8. Financial Statements and Supplementary Data

(in thousands, except share amounts)	December 31, 2017	December 31, 2016
ASSETS		
Cash and cash equivalents	$ 2,297,021	$ 2,107,722
Investment securities available-for-sale	2,418,088	2,007,258
Investment securities held-to-maturity (fair value of $16,502,745 and $13,153,861 at December 31, 2017 and 2016, respectively)	16,157,945	13,150,157
Loans	62,840,215	52,008,317
Less: Allowance for loan losses	(365,932)	(306,398)
Loans, net	62,474,283	51,701,919
Loans held for sale	87,695	407,226
Investments in life insurance	1,330,652	1,273,172
Tax credit investments	1,107,546	1,121,416
Prepaid expenses and other assets	1,254,720	923,324
Premises, equipment and leasehold improvements, net	296,197	207,592
Goodwill	198,447	203,177
Other intangible assets	91,774	112,399
Mortgage servicing rights	66,139	62,410
Total Assets	$87,780,507	$73,277,772
LIABILITIES AND EQUITY		
Liabilities:		
Deposits:		
Noninterest-bearing checking	$26,355,331	$22,740,303
Interest-bearing checking	17,324,683	14,575,890
Money market checking	9,251,504	7,969,787
Money market savings and passbooks	8,752,396	8,203,340
Certificates of deposit	7,234,794	5,113,061
Total Deposits	68,918,708	58,602,381
Short-term borrowings	100,000	100,000
Long-term FHLB advances	8,300,000	5,900,000
Senior notes	894,723	397,955
Subordinated notes	777,084	387,380
Debt related to variable interest entities	—	25,973
Other liabilities	971,691	955,431
Total Liabilities	79,962,206	66,369,120
Shareholders' Equity:		
Preferred stock, $0.01 par value per share; 25,000,000 shares authorized; 990,000 and 1,139,525 shares issued and outstanding at December 31, 2017 and 2016, respectively	990,000	1,139,525
Common stock, $0.01 par value per share; 400,000,000 shares authorized; 161,695,803 and 154,292,487 shares issued and outstanding at December 31, 2017 and 2016, respectively	1,617	1,543
Additional paid-in capital	3,778,913	3,301,705
Retained earnings	3,051,611	2,459,540
Accumulated other comprehensive income (loss)	(3,840)	6,339
Total Shareholders' Equity	7,818,301	6,908,652
Total Liabilities and Shareholders' Equity	$87,780,507	$73,277,772

See accompanying notes to financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

($ in thousands, except per share amounts)	Year Ended December 31, 2017	2016	2015
Interest income:			
Loans	$1,903,070	$1,573,403	$1,361,654
Investments	521,837	378,719	268,682
Other	14,861	19,266	27,464
Cash and cash equivalents	11,850	9,485	6,292
Total interest income	2,451,618	1,980,873	1,664,092
Interest expense:			
Deposits	134,786	73,765	61,072
Borrowings	165,369	89,946	86,357
Total interest expense	300,155	163,711	147,429
Net interest income	2,151,463	1,817,162	1,516,663
Provision for loan losses	60,181	47,192	55,439
Net interest income after provision for loan losses	2,091,282	1,769,970	1,461,224
Noninterest income:			
Investment management fees	282,868	224,626	178,738
Brokerage and investment fees	32,221	31,868	19,659
Trust fees	13,658	12,365	10,745
Foreign exchange fee income	27,691	22,406	22,517
Deposit fees	22,633	20,699	19,311
Loan and related fees	13,012	14,097	12,393
Loan servicing fees, net	13,800	13,465	13,040
Gain on sale of loans	9,233	4,828	9,725
Gain (loss) on investment securities, net	(833)	1,055	821
Income from investments in life insurance	37,874	48,119	35,474
Other income	8,304	1,284	2,630
Total noninterest income	460,461	394,812	325,053
Noninterest expense:			
Salaries and employee benefits	930,908	763,625	596,593
Information systems	208,625	153,207	119,114
Occupancy	136,746	119,139	106,856
Professional fees	56,950	52,740	73,022
FDIC assessments	55,792	44,200	35,250
Advertising and marketing	48,398	32,783	25,562
Amortization of intangibles	20,625	25,002	21,760
Other expenses	181,497	146,490	117,452
Total noninterest expense	1,639,541	1,337,186	1,095,609
Income before provision for income taxes	912,202	827,596	690,668
Provision for income taxes	154,542	154,168	168,523
Net income	757,660	673,428	522,145
Dividends on preferred stock	58,040	68,589	58,928
Net income available to common shareholders	$ 699,620	$ 604,839	$ 463,217
Net income	$ 757,660	$ 673,428	$ 522,145
Other comprehensive income (loss), net of tax:			
Net unrealized gain (loss) on securities available-for-sale	(10,564)	13,488	(7,752)
Reclassification of (gain) loss on securities available-for-sale to net income	1,359	(605)	(583)
Amortization of unrealized gains on securities transferred from available-for-sale to held-to-maturity	(974)	(1,324)	—
Reclassification of loss on cash flow hedges to net income	—	—	19
Other comprehensive income (loss)	(10,179)	11,559	(8,316)
Comprehensive income	$ 747,481	$ 684,987	$ 513,829
Basic earnings per common share	$ 4.44	$ 4.07	$ 3.27
Diluted earnings per common share	$ 4.31	$ 3.93	$ 3.18
Dividends per common share	$ 0.67	$ 0.63	$ 0.59

See accompanying notes to financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(in thousands, except share amounts)	Common Stock Shares	Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2014	**138,268,849**	**$ 889,525**	**$1,383**	**$2,313,592**	**$1,570,871**	**$ 3,096**	**$4,778,467**
Net income	—	—	—	—	522,145	—	522,145
Other comprehensive loss	—	—	—	—	—	(8,316)	(8,316)
Issuance of preferred stock, net	—	100,000	—	(3,408)	—	—	96,592
Issuance of common stock, net	6,950,000	—	70	429,223	—	—	429,293
Stock compensation expense	—	—	—	34,834	—	—	34,834
Net issuance of common stock under stock plans	890,941	—	8	(30,260)	—	—	(30,252)
Excess tax benefits on stock compensation	—	—	—	26,284	—	—	26,284
Dividends on preferred stock	—	—	—	—	(58,928)	—	(58,928)
Dividends on common stock	—	—	—	—	(84,436)	—	(84,436)
Balance at December 31, 2015	**146,109,790**	**989,525**	**1,461**	**2,770,265**	**1,949,652**	**(5,220)**	**5,705,683**
Net income	—	—	—	—	673,428	—	673,428
Other comprehensive income	—	—	—	—	—	11,559	11,559
Issuance of preferred stock, net	—	150,000	—	(4,816)	—	—	145,184
Issuance of common stock, net	6,900,000	—	69	527,431	—	—	527,500
Stock compensation expense	—	—	—	56,503	—	—	56,503
Net issuance of common stock under stock plans	1,282,697	—	13	(47,678)	—	—	(47,665)
Dividends on preferred stock	—	—	—	—	(68,589)	—	(68,589)
Dividends on common stock	—	—	—	—	(94,951)	—	(94,951)
Balance at December 31, 2016	**154,292,487**	**1,139,525**	**1,543**	**3,301,705**	**2,459,540**	**6,339**	**6,908,652**
Net income	—	—	—	—	757,660	—	757,660
Other comprehensive loss	—	—	—	—	—	(10,179)	(10,179)
Issuance of preferred stock, net	—	200,000	—	(6,325)	—	—	193,675
Redemption of preferred stock	—	(349,525)	—	—	—	—	(349,525)
Issuance of common stock, net	5,375,000	—	54	508,853	—	—	508,907
Stock compensation expense	—	—	—	75,245	—	—	75,245
Net issuance of common stock under stock plans	2,028,316	—	20	(100,565)	—	—	(100,545)
Dividends on preferred stock	—	—	—	—	(58,040)	—	(58,040)
Dividends on common stock	—	—	—	—	(107,549)	—	(107,549)
Balance at December 31, 2017	**161,695,803**	**$ 990,000**	**$1,617**	**$3,778,913**	**$3,051,611**	**$ (3,840)**	**$7,818,301**

See accompanying notes to financial statements.

FIRST REPUBLIC BANK
CONSOLIDATED STATEMENTS OF CASH FLOWS

($ in thousands)	Year Ended December 31, 2017	2016	2015
Operating Activities:			
Net income	$ 757,660	$ 673,428	$ 522,145
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for loan losses	60,181	47,192	55,439
Depreciation, amortization and accretion, net	75,685	42,137	14,229
Amortization of mortgage servicing rights	16,269	13,985	12,633
Loans originated for sale	(501,420)	(850,064)	(716,373)
Proceeds from sales and principal repayments of loans held for sale	525,247	836,516	806,426
Deferred income taxes	8,516	(43,532)	(38,171)
Gain on sale of loans	(9,233)	(4,828)	(9,725)
(Gain) loss on investment securities, net	833	(1,055)	(821)
Other net (gains) losses	(3,798)	853	(385)
Noncash cost of stock plans	75,245	56,503	34,834
Excess tax benefits on stock compensation	—	—	(26,284)
(Increase) decrease in other assets	(113,170)	26,170	(65,701)
Increase in other liabilities	120,123	55,180	39,012
Net Cash Provided by Operating Activities	1,012,138	852,485	627,258
Investing Activities:			
Loan originations, net of principal collections	(12,854,842)	(10,588,032)	(7,693,765)
Loans purchased	(289,301)	(310,558)	(163,823)
Loans sold	2,382,883	2,335,125	1,647,401
Purchases of securities available-for-sale	(749,353)	(1,409,144)	(2,524,018)
Proceeds from sales of securities available-for-sale	255,118	1,706,640	927,305
Proceeds from paydowns of securities available-for-sale	299,219	151,489	167,723
Purchases of securities held-to-maturity	(3,748,173)	(6,433,866)	(3,125,448)
Proceeds from sales, calls and paydowns of securities held-to-maturity	738,620	1,604,932	836,438
Purchases of FHLB stock	(121,500)	(97,875)	—
Proceeds from redemptions of FHLB stock	—	72,293	112,857
Purchases of investments in life insurance	(19,630)	(71,151)	(119,975)
Net change in tax credit investments	(210,429)	(173,176)	(173,610)
Additions to premises, equipment and leasehold improvements, net	(166,706)	(86,748)	(52,714)
Proceeds from sales of other assets	—	1,254	2,957
Cash paid for acquisition	—	(31,804)	(115,140)
Net Cash Used for Investing Activities	(14,484,094)	(13,330,621)	(10,273,812)
Financing Activities:			
Net increase in deposits	10,316,133	10,709,702	10,762,922
Net increase in short-term borrowings	—	—	100,000
Proceeds from long-term debt	4,743,328	3,241,748	—
Repayment of long-term debt	(1,450,000)	(950,000)	(1,275,000)
Payment of long-term debt issuance costs	(8,510)	(4,453)	—
Decrease in debt related to variable interest entities	(25,973)	(3,670)	(6,396)
Net proceeds from issuance of preferred stock	193,675	145,184	96,592
Net proceeds from issuance of common stock	508,907	527,500	429,293
Redemption of preferred stock	(349,525)	—	—
Proceeds from issuance of common stock under employee stock purchase plan	10,631	8,278	6,215
Proceeds from stock options exercised	34	150	167
Excess tax benefits on stock compensation	—	—	26,284
Payments of employee taxes withheld from share-based awards	(111,856)	(56,151)	(36,199)
Dividends on preferred stock	(58,040)	(68,589)	(58,928)
Dividends on common stock	(107,549)	(94,951)	(84,436)
Net Cash Provided by Financing Activities	13,661,255	13,454,748	9,960,514
Increase in Cash and Cash Equivalents	189,299	976,612	313,960
Cash and Cash Equivalents at the Beginning of Period	2,107,722	1,131,110	817,150
Cash and Cash Equivalents at the End of Period	$ 2,297,021	$ 2,107,722	$ 1,131,110
Supplemental Disclosure of Cash Flow Items			
Cash paid during period:			
Interest	$ 282,819	$ 148,393	$ 147,139
Income taxes	$ 95,163	$ 89,280	$ 92,630
Transfer of loans to held for sale	$ 2,098,167	$ 2,701,461	$ 1,522,999
Transfer of loans to securities available-for-sale	$ 234,699	$ 303,384	$ 104,106
Transfer of securities from available-for-sale to held-to-maturity	$ —	$ 781,165	$ —
Transfer of repossessed assets from loans to other assets	$ 1,930	$ 1,307	$ 2,541

See accompanying notes to financial statements.

Note 1. Summary of Significant Accounting Policies

Basis of Presentation and Organization

First Republic Bank ("First Republic" or the "Bank") is a California-chartered commercial bank and trust company headquartered in San Francisco with deposits insured by the Federal Deposit Insurance Corporation ("FDIC"). First Republic has operated for 32 years and the current legal entity has been operating since July 1, 2010. Our consolidated financial statements include the accounts of First Republic and its wholly-owned subsidiaries: First Republic Investment Management, Inc. ("FRIM"), First Republic Securities Company, LLC ("FRSC"), First Republic Trust Company of Delaware LLC ("FRTC Delaware"), First Republic Lending Corporation ("FRLC") and Gradifi, Inc. ("Gradifi"). All significant intercompany balances and transactions have been eliminated. Effective during the third quarter of 2017, the Bank no longer consolidates certain real estate mortgage investment conduits ("REMICs") formed in 2000 through 2002, which were variable interest entities ("VIEs"), since these REMICs' securities were redeemed and the Bank is no longer the primary beneficiary.

Nature of Operations

First Republic and its subsidiaries offer private banking, private business banking and private wealth management, including investment, trust and brokerage 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; and New York, New York. First Republic offers a complete line of banking products for individuals and businesses, including deposit services, as well as residential, commercial and personal loans.

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

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

Gradifi is a corporate provider of education related benefit plans. Through Gradifi, employers can make direct contributions to education debt repayment or savings plans for their employees.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. Actual results could differ from these estimates. Material estimates subject to change include those related to allowance for loan losses, mortgage servicing rights, goodwill, identifiable intangible assets, fair value measurements, and income taxes.

Reclassifications

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

Investment Securities

The Bank follows Accounting Standards Codification ("ASC") 320, "Investments—Debt and Equity Securities," which addresses the accounting and reporting for investments in equity securities that have readily determinable fair values and for all investments in debt securities. Debt securities that the Bank has the positive intent and ability to hold to maturity are classified as held-to-maturity and reported at amortized cost. Debt securities that the Bank might not hold until maturity and marketable equity securities are classified as securities available-for-sale and reported at fair value, with unrealized gains and losses excluded from earnings and reported as accumulated other comprehensive income, which is included in equity.

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

The Bank conducts other-than-temporary impairment ("OTTI") analysis on a quarterly basis. The initial indicator of OTTI for both debt and equity securities is a decline in market value below the amount recorded for an investment and the severity and duration of the decline.

For a debt security for which there has been a decline in the fair value below its amortized cost basis, the Bank recognizes OTTI if the Bank (1) has the intent to sell the security, (2) it is more likely than not that the Bank will be required to sell the security before recovery of its amortized cost basis, or (3) the Bank does not expect to recover the entire amortized cost basis of the security.

Estimating recovery of the amortized cost basis of a debt security is based upon an assessment of the cash flows expected to be collected. If the present value of the cash flows expected to be collected is less than the amortized cost, OTTI is considered to have occurred.

If the Bank intends to sell the debt security, or if it is more likely than not that the Bank will be required to sell the debt security before recovery, an OTTI write-down is recognized in earnings equal to the entire difference between the amortized cost basis and the fair value of the security. For debt securities that are considered other-than-temporarily impaired that the Bank does not intend to sell or it is more likely than not that the Bank will not be required to sell before recovery, the OTTI write-down is separated into an amount representing the credit loss, which is recognized in earnings, and the amount related to all other factors, which is recognized in other comprehensive income. The measurement of the credit loss component is equal to the difference between the debt security's cost basis and the present value of its expected future cash flows discounted at the security's effective yield.

A decline in the fair value of a marketable equity security below cost is evaluated for the Bank's intent to sell, the severity and duration of the impairment, and the financial condition of the investee. If the Bank intends to sell the security, or if evidence exists that impairment is other-than-temporary, an OTTI write-down is recognized in earnings equal to the entire difference between the cost and the fair value of the security.

Loans

Loans are reported at their outstanding principal balances net of any charge-offs, unamortized deferred fees and costs on originated loans and premiums or discounts on purchased loans. On July 1, 2010, in connection with

the re-establishment of First Republic as an independent institution, loan discounts from purchase accounting were recorded and are included in the basis of the loans.

Interest income from loans is recognized in the month earned. In accordance with ASC 310-20, "Nonrefundable Fees and Other Costs," loan origination fees and direct loan origination costs are deferred and amortized as a yield adjustment over the contractual life of each loan using a level yield or straight-line methodology, depending upon the type of loan.

Loans are placed on nonaccrual status when principal or interest payments are 90 days or more past due, except for single family loans that are well secured and in the process of collection, or earlier when management determines that collection of principal or interest is unlikely. When a loan is placed on nonaccrual status, the Bank reverses accrued unpaid interest receivable against interest income and accounts for the loan on the cash or cost recovery method, until it qualifies for return to accrual status. The Bank may return a loan to accrual status when principal and interest payments are current, a satisfactory payment history is established and collectibility improves or the loan otherwise becomes well secured and is in the process of collection.

Allowance for Loan Losses and Loan Charge-Offs

The Bank reviews and adjusts the allowance for loan losses on a quarterly basis. It is the Bank's policy to promptly charge off balances that are deemed uncollectible. The Bank evaluates any allowance for loan losses that would be required on the loans recorded at fair value in purchase accounting by evaluating whether the loans had experienced a deterioration in credit since the acquisition date. If the loan had experienced a credit deterioration, the Bank provides an allowance by comparing any reserve required to the basis in the loans, including the remaining loan discounts. In addition, the Bank provides for any loan losses associated with new loan originations based upon our assessment of credit losses inherent in the portfolio.

The principal sources of guidance on accounting for impairment in a loan portfolio are ASC 450, "Contingencies," and ASC 310-10-35, "Receivables—Subsequent Measurement." Under the provisions of ASC 310-10-35, a loan is considered impaired when, based on current information and events, it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the loan agreement. Nonaccrual loans with a balance greater than or equal to $1 million or loans modified in a troubled debt restructuring are generally considered impaired. The Bank measures impairment of a loan that is collateral dependent based on the fair value of the underlying collateral, net of selling costs. For a loan that is not collateral dependent, the Bank measures impairment using the present value of expected future cash flows, discounted at the instrument's effective interest rate. If the fair value of the collateral or the present value of expected future cash flows is less than the recorded investment in the loan, the Bank recognizes impairment by recording a charge-off or creating a valuation allowance.

All other loans, including individually evaluated loans determined not to be impaired under ASC 310-10-35, are included in a group of loans that are evaluated for estimated losses under ASC 450. For these non-impaired loans, the Bank segments its portfolio into groups that have similar risk characteristics. For each group, credit losses inherent in the portfolio are estimated based on the Bank's historical loss experience.

The Bank also maintains a qualitative reserve, which represents the qualitative portion of the allowance for loan losses. This qualitative reserve is determined based on management's assessments of the risks that may lead to a loan loss experience different than our historical loss experience and therefore not reflected in the quantitative model. The Bank uses qualitative factors that are intended to address developing external and internal environmental trends and include considerations, such as changes in current economic and business conditions, the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, and other external factors, such as competition and the legal and regulatory environment.

In addition, federal banking agencies will periodically review our allowance for loan losses and the value attributed to nonaccrual loans or to real estate acquired through foreclosure. Such regulatory agencies may require us to adjust our determination of the amount of allowance for loan losses, nonaccrual loans or other real estate owned.

Other Real Estate Owned

Real estate acquired through foreclosure is recorded at the lower of cost or fair value less costs to sell upon transfer of the loans to foreclosed assets. Subsequent declines in value are recorded through an expense to the income statement and a charge to the valuation allowance. The Bank records costs related to holding real estate as expenses when incurred.

Investments in Life Insurance

The Bank initially records investments in bank-owned life insurance at cost and subsequently adjusts the carrying value of the investment quarterly to its cash surrender value. The Bank recognizes the resulting income or loss in noninterest income.

Tax Credit Investments

In accordance with ASC 323-740, "Investments—Equity Method and Joint Ventures—Income Taxes," the initial cost of the Bank's low income housing tax credit ("tax credit") investments is amortized over the life of the investment using a proportional amortization method. Under the proportional amortization method, amortization expense recognized each period is based on the amount of tax credits and other tax benefits for the period as a percentage of expected total tax credits and other tax benefits of the investment. Beginning in 2018, tax credit investment amortization levels will be increased to reflect the lower federal tax rate from tax reform legislation (the "Tax Reform Act"). Amortization expense is presented as a component of provision for income taxes on the consolidated statements of income. Tax credit investments are evaluated on a quarterly basis to determine if it is more likely than not that the carrying amount of the tax credit investments will not be realized through the future recognition of tax credits and other tax benefits. If it is more likely than not that future tax credits and other tax benefits will not be realized, an impairment loss is recorded.

Selling and Servicing Loans

The Bank sells loans on a non-recourse basis to generate servicing income, to provide funds for additional lending and for asset/liability management purposes. Loans that are sold include loans originated for sale to investors under commitments executed prior to origination, existing loans that are sold through bulk sales and loans sold through securitizations. The Bank classifies loans as held for sale when the Bank has the intent to sell, is waiting on a pre-approved investor purchase or is negotiating with a specific investor for the sale of specific loans that meet selected criteria. Loans held for sale include net deferred loan fees or costs and are carried at the lower of aggregate cost or fair value.

The Bank recognizes a sale only when consideration is received and control is transferred to the buyer. The Bank retains the mortgage servicing rights ("MSRs") on substantially all loans sold. The Bank's class of servicing rights consists of loans sold that are secured by real estate. MSRs in loans sold are initially measured at fair value at the date of transfer.

To determine the fair value of MSRs, the Bank uses a valuation model that calculates the present value of estimated future net servicing income. The Bank uses assumptions in the valuation model that market participants use in estimating future net servicing income, including estimates of prepayment speeds, discount rate, cost to service, escrow account earnings, contractual servicing fees and ancillary income.

MSRs are reported at the lower of amortized cost or fair value. MSRs are amortized in proportion to and over the period of estimated net servicing income. To calculate the initial fair value of MSRs and, subsequently, to measure impairment, the Bank values MSRs by stratifying loans by the year they are sold, by product type (fixed, hybrid or adjustable) and interest rate coupon range. Hybrid loans are further stratified by their initial fixed-rate period. The Bank evaluates impairment of MSRs for a stratum periodically based on their current fair value, actual prepayment experience and other market factors. If the fair value of MSRs for a stratum is less than the amortized cost, the Bank records a provision for a valuation allowance. Subsequently, the Bank adjusts the valuation allowance for changes in fair value to the extent that fair value does not exceed the amortized cost. The Bank evaluates at least quarterly the recoverability of the valuation allowance on MSRs. If the Bank determines that a portion of the valuation allowance is unrecoverable, primarily due to loan prepayments, the Bank records a direct write-down by reducing both the amortized cost of MSRs for a stratum and the related valuation allowance.

Goodwill and Other Identifiable Intangible Assets

In accordance with ASC 805, "Business Combinations," the Bank records the cost of acquisitions based on the estimated fair values of the assets acquired and liabilities and noncontrolling interests assumed at the acquisition date. Goodwill represents the excess of the purchase price over the fair value of the net assets acquired.

In accordance with ASC 350-20, "Goodwill," the Bank evaluates goodwill for impairment annually and on an interim basis if events or changes in circumstances indicate that its implied fair value is less than the carrying amount. Such an event or circumstance may include an adverse change in the business climate or market, a legal factor, an action by the regulators, introduction of or an increase in competition, or a loss of key personnel. In accordance with ASC 350-20, the Bank has the option to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount before applying the two-step goodwill impairment test. The qualitative factors considered include, but are not limited to, industry and market conditions and trends, the Bank's financial performance and any Bank-specific events relevant to the assessment. If the assessment of qualitative factors indicates that it is not more likely than not that impairment exists, no further testing is performed. If there is an indication that impairment exists, a quantitative test is performed to determine whether the fair value of each reporting unit, including goodwill, is less than the carrying amount of the reporting unit. If the implied fair value of goodwill is less than its carrying amount, goodwill is considered impaired and an impairment loss is recognized as the amount by which the carrying amount of goodwill exceeds its implied fair value.

Identifiable intangible assets related to core deposits, wealth management customer relationships and trade name/trademark are reported as other intangible assets. Core deposits and wealth management customer relationships are amortized on an accelerated basis over their useful lives, not to exceed ten years. The Bank evaluates intangible assets associated with core deposits and wealth management customer relationships for impairment whenever circumstances indicate that the carrying amount may not be recoverable, in accordance with ASC 360-10, "Impairment or Disposal of Long-Lived Assets." If the carrying amount is not recoverable and exceeds fair value, an impairment loss is recognized. The trade name/trademark is considered to have an indefinite useful life. In accordance with ASC 350-30, "General Intangibles Other Than Goodwill," the trade name/trademark is evaluated for impairment annually and on an interim basis if events or changes in circumstances indicate that its fair value is less than the carrying amount. ASC 350-30 allows the Bank the option to first perform a qualitative assessment to determine whether the indefinite-lived intangible asset is impaired before determining its fair value. The qualitative factors considered include, but are not limited to, industry and market conditions and trends, the Bank's financial performance and any Bank-specific events relevant to the assessment. If the factors considered indicate that impairment exists, a quantitative test is performed and an impairment loss is recognized if the determined fair value is less than the carrying amount.

Premises, Equipment and Leasehold Improvements

Premises, equipment and leasehold improvements are recorded at cost, less accumulated depreciation and amortization. Depreciation and amortization are calculated on a straight-line basis over the estimated useful lives of the assets, which generally range from three to ten years, or the lease term, if the term is less than ten years.

Software

Software is recorded at cost, less accumulated amortization. Software includes both purchased software and capitalized costs associated with internally developed software. Amortization is calculated on a straight-line basis over the estimated useful life of the software, which ranges from three to ten years. Software is included in "Premises, equipment and leasehold improvements, net" in the consolidated balance sheets.

Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences of differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. On December 22, 2017, the Tax Reform Act was enacted into law. Among other changes, the Tax Reform Act reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. See Note 19, "Income Taxes" for additional information on the impact of the Tax Reform Act to the Bank.

The Bank records a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized. Management believes it is more likely than not that forecasted income, including income that may be generated as a result of certain tax planning strategies, sources of taxable income in carryback periods and tax effects of the deferred tax liabilities, will be sufficient to fully recover the remaining deferred tax assets. The Bank will continue to evaluate the realizability of the deferred tax assets by assessing the need for a valuation allowance.

A tax position that meets the "more likely than not" recognition threshold is measured to determine the amount of benefits to recognize. The tax position is measured at the largest amount of benefit that is greater than 50% likely of being realized upon settlement. Interest and penalties are recognized as a component of income tax expense.

The Bank files a consolidated U.S. tax return and separate state and local tax returns.

Statement of Cash Flows

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

Derivative Instruments and Hedging Activities

The Bank follows ASC 815, "Derivatives and Hedging," for the accounting and reporting of derivative instruments, including derivative instruments embedded in other contracts, and for hedging activities. On the date that the Bank enters into a derivative contract, the Bank designates the derivative contract as either a hedge of the fair value of a recognized asset or liability ("fair value" hedge), a hedge of the variability of cash flows related to a recognized asset or liability ("cash flow" hedge) or a contract that does not qualify for hedge accounting

("freestanding derivative"). The Bank records all derivatives at fair value as either other assets or other liabilities. The Bank accounts for changes in fair value of a derivative based on the designation, which is determined by its intended use. There were no fair value or cash flow hedges outstanding as of and for the years ended December 31, 2017, 2016 or 2015.

The Bank has freestanding derivative assets and liabilities, which consist of foreign exchange contracts executed with clients in which the Bank offsets the client exposure with another financial institution counterparty. The Bank does not retain significant foreign exchange risk or credit risk. The Bank uses current market prices to determine the fair value of these contracts.

The Bank originates certain mortgage loans with the intention of selling these loans to investors. The Bank enters into commitments to originate the loans whereby the interest rate on the loan paid by the borrower is set prior to funding ("interest rate lock commitments"). Such interest rate lock commitments are accounted for as freestanding derivative instruments that do not qualify as hedges. However, the interest rate exposure is economically hedged by the forward loan sale commitment to the investor. The change in fair value of these freestanding derivatives is recognized in earnings.

The Bank does not conduct proprietary trading activities in derivative instruments for its own accounts.

Share-Based Compensation

The Bank follows ASC 718, "Compensation—Stock Compensation," in accounting for its stock compensation plan. The Bank has awarded stock options, restricted stock units, performance share units and restricted stock awards to its employees, officers and directors.

The Bank measures the compensation cost of stock options based on the fair value of the options at the grant date. Restricted stock units, performance share units and restricted stock awards are valued at the closing market price of the Bank's common stock at the date of grant. Compensation expense is recognized over the requisite service period, which is generally the vesting period of the awards.

Investment Management, Brokerage and Investment and Trust Fees

Investment management fees, brokerage and investment fees, and trust fees are generally based upon the market value of assets under management or administration or the volume of transactions and are recorded on the accrual basis over the period in which the service is provided or the underlying transactions occur.

Accounting Standards Adopted in 2017

During the year ended December 31, 2017, the Bank adopted the following Accounting Standards Updates ("ASUs") issued by the Financial Accounting Standards Board ("FASB"):

ASU 2017-01—Business Combinations (ASC 805): Clarifying the Definition of a Business	
The amendments, which were issued in January 2017, clarify the definition of a business, and provide additional guidance for determining whether transactions should be accounted for as an acquisition (or disposal) of assets or a business. Under the amendments, an initial test is performed to determine whether substantially all of the fair value of the gross assets acquired is concentrated in a single asset or group of similar assets. If there is concentration, then the acquisition is not a business. If there is not concentration, then additional analysis is performed under the framework of the guidance to determine whether the set of assets and activities have an input and a substantive process that together significantly contribute to the ability to create an output.	The guidance was early adopted as of January 1, 2017 and has been applied prospectively. Adoption of this guidance did not have a material impact on the Bank's consolidated financial statements.

ASU 2016-07—Investments—Equity Method and Joint Ventures (ASC 323): Simplifying the Transition to the Equity Method of Accounting	
The amendments, which were issued in March 2016, simplify how the equity method of accounting is applied when this method of accounting is triggered subsequent to the initial acquisition of an investment due to changes in ownership interests or other factors. The amendments require an investor to apply the equity method of accounting prospectively. Previously, such change in accounting was required to be applied retrospectively.	The guidance became effective as of January 1, 2017 and has been applied prospectively. The adoption of this guidance did not have an impact on the Bank's consolidated financial statements.

ASU 2017-08—Receivables—Nonrefundable Fees and Other Costs (ASC 310-20): Premium Amortization on Purchased Callable Debt Securities	
The amendments, which were issued in March 2017, require the premium on purchased callable debt securities to be amortized to the earliest call date, rather than over the contractual life of the securities. The accounting for discounts on callable debt securities does not change.	The guidance was early adopted during the quarter ended June 30, 2017, and retroactively applied effective as of January 1, 2017. The adoption of this guidance did not have an impact on the Bank's consolidated financial statements.

Recent Accounting Standards

The following ASUs have been issued by the FASB, but were not yet effective as of December 31, 2017:

ASU 2014-09—Revenue from Contracts with Customers (ASC 606) and subsequent related ASUs

ASC 606, which was issued in May 2014, replaces existing revenue recognition guidance for contracts to provide goods or services to customers. ASC 606 establishes a principles-based approach to recognizing revenue that applies to all contracts other than those covered by other authoritative GAAP guidance. In addition, quantitative and qualitative disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows are also required. ASC 606 applies to the Bank's following revenue streams: investment management, brokerage, trust and deposit fees. This guidance does not apply to interest income, which represents the majority of the Bank's revenues.	The Bank adopted this guidance effective January 1, 2018 using a modified retrospective approach. There were no changes to the timing or amount of revenue recognized or to the accounting for contract costs as a result of the adoption of this guidance. Additional quantitative and qualitative disclosures required under this guidance will be included in the consolidated financial statements beginning in the first quarter of 2018.

ASU 2016-01—Financial Instruments—Overall (ASC 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities

ASC 825-10, which was issued in January 2016, requires certain equity investments to be measured at fair value, with changes in fair value recognized in net income. There are no changes to the accounting for debt securities or equity securities accounted for under the equity method. Upon adoption, available-for-sale marketable equity securities will be measured at fair value with unrealized gains or losses reported in net income. Non-marketable equity securities will be measured either using the net asset value practical expedient when applicable, or if elected, using an alternative method where securities are measured at cost less impairment, adjusted for observable price changes of the same or similar investment of the same issuer. In addition, the amendments require disclosure of the fair value of financial instruments measured at amortized cost to be presented based on the exit price notion, and require separate presentation of financial assets and financial liabilities by measurement category and type.	The Bank adopted this guidance effective January 1, 2018 using a modified retrospective approach, except for changes in accounting for non-marketable equity securities, which was applied prospectively. The adoption of this guidance did not have a material impact on its consolidated financial statements.

ASU 2016-15—Statement of Cash Flows (ASC 230): Classification of Certain Cash Receipts and Cash Payments

The amendments, which were issued in August 2016, clarify or add guidance on how entities should classify certain cash receipts and payments on the statement of cash flows to reduce diversity in practice on how certain transactions are classified. The amendments provide guidance regarding the presentation of items such as payments for debt prepayment or debt extinguishment costs, proceeds from the settlement of insurance claims, proceeds from investments in life insurance, and distributions received from equity method investees. In addition, the amendments provide a three step approach for classifying cash receipts and payments that may fall within more than one cash flow category.	The Bank adopted this guidance effective January 1, 2018, on a retrospective basis. The adoption of this guidance did not have a material impact on its consolidated statements of cash flows.

ASU 2017-09—Compensation—Stock Compensation (ASC 718): Scope of Modification Accounting	
The amendments, which were issued in May 2017, clarify when changes to share-based payment awards must be accounted for as modifications. Under the amended guidance, modification accounting is not required if the fair value, vesting conditions, or classification of the award (as equity or liability) are the same before and after the modification.	The Bank adopted this guidance effective January 1, 2018 on a prospective basis. The adoption of this guidance did not have a material impact on its consolidated financial statements.

ASU 2017-12—Derivatives and Hedging (ASC 815): Targeted Improvements to Accounting and Hedging Activities	
The amendments, which were issued in September 2017, simplify and improve hedge accounting, including expanding hedging strategies to include the "last-of-layer" method. The last-of-layer method can be used to hedge either prepayable assets in a closed portfolio or beneficial interests secured by prepayable financial instruments. For prepayable financial assets in a closed portfolio that are eligible to be hedged using the last-of-layer method, entities may reclassify eligible securities classified as held-to-maturity to available-for-sale upon adoption.	The Bank early adopted this guidance effective in January 2018 using a modified retrospective approach. Refer to Note 23, "Subsequent Events" for information regarding the adoption and related transfer of securities.

ASU 2018-02—Income Statement—Reporting Comprehensive Income (ASC 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income	
The amendments, which were issued in February 2018, allow entities to reclassify disproportionate deferred tax effects created from the application of the new federal corporate income tax rate from accumulated other comprehensive income ("AOCI") to retained earnings. The amount of the reclassification is the difference between (1) the amount initially charged or credited directly to other comprehensive income at the previously enacted federal corporate income tax rate that remains in accumulated other comprehensive income and (2) the amount that would have been charged or credited using the newly enacted federal corporate income tax rate. Certain disclosures, including whether an entity has elected to reclassify the disproportionate tax effects, are also required.	The Bank early adopted this guidance and elected to reclassify the disproportionate tax effects from AOCI to retained earnings effective January 1, 2018. The adoption of this guidance did not have a material impact on its consolidated financial statements.

ASU 2016-02—Leases (ASC 842)	
ASC 842, which was issued in February 2016, replaces existing lease guidance for lessees, and requires operating leases to be recognized on the balance sheet. Upon adoption of the guidance, lessees will recognize a lease liability for the present value of future lease payments, and a corresponding right-of-use asset. For operating leases, ASC 842 does not significantly change the recognition or measurement of lease expense on the income statement, or the presentation on the statement of cash flows, compared to existing GAAP. Lessor accounting also remains relatively unchanged. Quantitative and qualitative disclosures regarding the amount, timing and uncertainty of cash flows from leases are also required.	The Bank will adopt this guidance effective January 1, 2019, however, the transition method applied will depend upon finalization of proposed transition guidance from the FASB. The Bank is currently performing a gap assessment of its current state under existing guidance, compared to the requirements under the new guidance, and assessing the population of its lease contracts. Upon adoption of this guidance, the Bank will record a lease liability and right-of-use asset on its consolidated balance sheet.

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

The amendments, which were issued in January 2017, simplify the accounting for goodwill impairment by removing Step 2 of the impairment test, which compared the implied fair value of goodwill to its carrying amount. Measuring the implied fair value of goodwill followed the same process as determining the fair value of individual assets and liabilities assumed in a business combination, which was complex. The amended guidance simplifies the impairment test to only require a comparison of the fair value of a reporting unit with its carrying amount, including the effect of tax deductible goodwill on the carrying amount of the reporting unit. Entities still have the option to perform a qualitative assessment to determine if the quantitative impairment test is needed.	The amendments are effective for interim and annual periods beginning after December 15, 2019 and are applied on a prospective basis. Early adoption is permitted. The Bank does not expect this guidance to have a material impact on its consolidated financial statements.

ASU 2016-13—Financial Instruments—Credit Losses (ASC 326): Measurement of Credit Losses on Financial Instruments

ASC 326, which was issued in June 2016, revises the methodology for estimating credit losses on loans receivable, held-to-maturity debt securities, and unfunded loan commitments. Under ASC 326, the current expected credit losses ("CECL") model is based on lifetime expected losses, rather than incurred losses, and requires the recognition of credit loss expense in the statement of income and a related allowance for credit losses on the balance sheet at the time of origination or purchase of a loan receivable or held-to-maturity debt security. Subsequent changes in this estimate are recorded through credit loss expense and related allowance. The CECL model requires the use of not only relevant historical experience and current conditions, but also reasonable and supportable forecasts of future events and circumstances, thus incorporating a broad range of information in developing credit loss estimates, which could result in significant changes to both the timing and amount of credit loss expense and allowance. Under ASC 326, available-for-sale debt securities are evaluated for impairment if fair value is less than amortized cost. Estimated credit losses are recorded if the present value of expected future cash flows is less than amortized cost, and are recorded through a credit loss expense and an allowance, rather than a write-down of the investment. Changes in fair value that are not credit-related will continue to be recorded in other comprehensive income. Certain additional disclosures are required.	The Bank will adopt this guidance effective January 1, 2020 using a modified retrospective approach, with certain aspects requiring a prospective approach (if applicable). The Bank is currently assessing the impact of this guidance on its consolidated financial statements. To date, the Bank has established project governance, completed its initial gap assessment of its current state under existing guidance, compared to the requirements under the new guidance and is addressing identified gaps.

Note 2. Investment Securities

The following table presents information related to available-for-sale and held-to-maturity securities:

($ in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2017				
Available-for-sale:				
U.S. Treasury securities	$ 55,439	$ —	$ (441)	$ 54,998
Agency residential mortgage-backed securities (“MBS”)	34,791	202	(419)	34,574
Other residential MBS	4,888	—	(28)	4,860
Agency commercial MBS	2,267,102	3,314	(14,526)	2,255,890
Securities of U.S. states and political subdivisions—taxable	47,258	191	—	47,449
Mutual funds and marketable equity securities	19,807	689	(179)	20,317
Total	$ 2,429,285	$ 4,396	$ (15,593)	$ 2,418,088
Held-to-maturity:				
U.S. Government-sponsored agency securities	$ 1,400,025	$ 1	$ (45,090)	$ 1,354,936
Agency residential MBS	2,734,819	2,971	(39,745)	2,698,045
Other residential MBS	1,631	34	(11)	1,654
Agency commercial MBS	3,017,012	—	(72,730)	2,944,282
Securities of U.S. states and political subdivisions:				
Tax-exempt municipal securities	8,804,924	505,182	(20,404)	9,289,702
Tax-exempt nonprofit debentures	146,529	4,466	(468)	150,527
Taxable municipal securities	53,005	10,594	—	63,599
Total	$16,157,945	$523,248	$(178,448)	$16,502,745
December 31, 2016				
Available-for-sale:				
U.S. Treasury securities	$ 111,515	$ —	$ (486)	$ 111,029
Agency residential MBS	48,680	194	(645)	48,229
Other residential MBS	7,963	—	(301)	7,662
Agency commercial MBS	1,785,410	5,768	(281)	1,790,897
Securities of U.S. states and political subdivisions—taxable	47,246	247	—	47,493
Marketable equity securities	1,807	141	—	1,948
Total	$ 2,002,621	$ 6,350	$ (1,713)	$ 2,007,258
Held-to-maturity:				
U.S. Government-sponsored agency securities	$ 993,179	$ 71	$ (47,482)	$ 945,768
Agency residential MBS	2,689,035	903	(63,036)	2,626,902
Other residential MBS	1,875	40	(47)	1,868
Agency commercial MBS	2,385,928	2,044	(17,989)	2,369,983
Securities of U.S. states and political subdivisions:				
Tax-exempt municipal securities	6,876,777	281,703	(166,321)	6,992,159
Tax-exempt nonprofit debentures	150,322	4,331	(491)	154,162
Taxable municipal securities	53,041	9,978	—	63,019
Total	$13,150,157	$299,070	$(295,366)	$13,153,861

During the year ended December 31, 2016, the Bank transferred $781.2 million of agency commercial MBS from the available-for-sale category to the held-to-maturity category. The transferred securities had a total unrealized gain (net of taxes) of $4.9 million in accumulated other comprehensive income on the date of transfer, which is being amortized into interest income over the remaining life of the securities.

The Bank pledges investment securities at the Federal Reserve Bank of San Francisco to maintain the ability to borrow at the discount window, at the Federal Home Loan Bank of San Francisco (the "FHLB") to secure borrowings, or at a correspondent bank as collateral to secure trust funds and public deposits. At December 31, 2017 and 2016, the carrying value of investment securities pledged was $8.7 billion and $6.5 billion, respectively, of which $302.5 million and $348.1 million of collateral was required to be pledged under such arrangements as of December 31, 2017 and 2016, respectively.

In addition, as of December 31, 2016, held-to-maturity tax-exempt municipal securities with a carrying value of $104.6 million and a fair value of $111.7 million were sold under an agreement to repurchase (the "repurchase agreement"). The liability for the securities sold under the repurchase agreement was $100.0 million as of December 31, 2016 and matured in the second quarter of 2017.

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

	December 31, 2017						
	Less than 12 months		12 months or more		Total		
($ in thousands)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Total Number of Securities
Available-for-sale:							
U.S. Treasury securities	$ —	$ —	$ (441)	$ 54,998	$ (441)	$ 54,998	1
Agency residential MBS	(5)	1,707	(414)	16,712	(419)	18,419	22
Other residential MBS	—	—	(28)	4,860	(28)	4,860	3
Agency commercial MBS	(8,316)	749,649	(6,210)	292,648	(14,526)	1,042,297	26
Mutual funds and marketable equity securities	(179)	17,821	—	—	(179)	17,821	1
Total	$ (8,500)	$ 769,177	$ (7,093)	$ 369,218	$ (15,593)	$1,138,395	53
Held-to-maturity:							
U.S. Government-sponsored agency securities	$(11,550)	$ 664,869	$ (33,540)	$ 648,066	$ (45,090)	$1,312,935	48
Agency residential MBS	(2,976)	533,672	(36,769)	1,694,831	(39,745)	2,228,503	68
Other residential MBS	—	—	(11)	1,174	(11)	1,174	4
Agency commercial MBS	(13,819)	1,055,642	(58,911)	1,888,640	(72,730)	2,944,282	81
Securities of U.S. states and political subdivisions:							
Tax-exempt municipal securities	(62)	27,652	(20,342)	958,526	(20,404)	986,178	103
Tax-exempt nonprofit debentures	(468)	48,420	—	—	(468)	48,420	3
Total	$(28,875)	$2,330,255	$(149,573)	$5,191,237	$(178,448)	$7,521,492	307

	December 31, 2016						
	Less than 12 months		12 months or more		Total		
($ in thousands)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Total Number of Securities
Available-for-sale:							
U.S. Treasury securities	$ (486)	$ 111,029	$ —	$ —	$ (486)	$ 111,029	2
Agency residential MBS	(91)	16,878	(554)	14,511	(645)	31,389	28
Other residential MBS	—	—	(301)	7,662	(301)	7,662	3
Agency commercial MBS	(281)	388,748	—	—	(281)	388,748	5
Total	$ (858)	$ 516,655	$(855)	$22,173	$ (1,713)	$ 538,828	38
Held-to-maturity:							
U.S. Government-sponsored agency securities	$ (47,482)	$ 886,528	$ —	$ —	$ (47,482)	$ 886,528	31
Agency residential MBS	(63,036)	2,472,610	—	—	(63,036)	2,472,610	67
Other residential MBS	—	—	(47)	1,315	(47)	1,315	4
Agency commercial MBS	(17,989)	1,828,094	—	—	(17,989)	1,828,094	47
Securities of U.S. states and political subdivisions:							
Tax-exempt municipal securities	(166,321)	2,647,244	—	—	(166,321)	2,647,244	323
Tax-exempt nonprofit debentures	(491)	21,745	—	—	(491)	21,745	1
Total	$(295,319)	$7,856,221	$ (47)	$ 1,315	$(295,366)	$7,857,536	473

The Bank conducts a regular assessment of its investment securities portfolio to determine whether securities are other-than-temporarily impaired considering, among other factors, the nature of the securities, credit ratings or financial condition of the issuer, the extent and duration of the unrealized loss, expected cash flows, market conditions and the Bank's ability to hold the securities through the anticipated recovery period.

The Bank does not intend to sell the available-for-sale or held-to-maturity investment securities included in the tables above and has concluded that it is more likely than not that it will not be required to sell any of the investments prior to recovery of the amortized cost basis.

U.S. Government-Sponsored Agency Securities. At December 31, 2017, the unrealized losses on the Bank's investments in U.S. Government-sponsored agency securities are primarily due to increases in market interest rates since the securities were purchased and are not due to credit losses, given the explicit or implicit guarantees provided by agencies of the U.S. Government. The Bank expects to continue to receive all contractual principal and interest payments. Therefore, the Bank does not consider these investments to be other-than-temporarily impaired.

Agency Residential MBS and Agency Commercial MBS. At December 31, 2017, the unrealized losses on the Bank's investments in agency residential MBS and agency commercial MBS are primarily due to increases in market interest rates since the securities were purchased and are not due to credit losses, given the explicit or implicit guarantees provided by the U.S. Government or agencies of the U.S. Government. The Bank expects to continue to receive all contractual principal and interest payments. Therefore, the Bank does not consider these investments to be other-than-temporarily impaired.

Tax-Exempt Municipal Securities. At December 31, 2017, the unrealized losses on the Bank's investments in tax-exempt municipal securities are primarily due to increases in market interest rates since the securities were purchased and are not due to the credit quality of the securities. The Bank monitors these securities regularly to determine if any changes in ratings have occurred and conducts its internal credit analysis to determine if the issuer has experienced any change in financial condition that may result in a potential loss of the contractual principal and interest payments. The Bank expects to continue to receive all contractual principal and interest payments.

There were no other-than-temporary impairment charges on securities during the years ended December 31, 2017 and 2016.

During the year ended December 31, 2015, the Bank recognized OTTI charges on held-to-maturity debt securities from one municipal issuer, which resulted in an impairment loss of $207,000 included in earnings. The write-down was recorded in response to a significant deterioration in the creditworthiness of the issuer of these securities.

During the year ended December 31, 2017, the Bank sold municipal securities from the held-to-maturity portfolio with a carrying value of $32.1 million. The sale was in response to evidence of deterioration in creditworthiness of the issuers as a result of a hurricane.

During each of the years ended December 31, 2016 and 2015, the Bank sold a tax-exempt municipal security with a carrying value of $8.6 million and $9.8 million, respectively, from the held-to-maturity portfolio in response to the issuer's request to restructure the security owned by the Bank followed by an immediate purchase by the Bank of the newly issued security from the same issuer, and not due to a change in the issuer's credit rating.

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

	Year Ended December 31,		
($ in thousands)	2017	2016	2015
Available-for-sale:			
Sales proceeds	$255,118	$1,706,640	$927,305
Held-to-maturity:			
Sales proceeds	$ 33,664	$ 8,614	$ 9,853

The following table presents gains and losses realized on investment securities:

	Year Ended December 31,		
($ in thousands)	2017	2016	2015
Available-for-sale:			
Gross realized gains on sales	$ 10	$ 5,137	$ 2,182
Gross realized losses on sales	(2,361)	(4,090)	(1,168)
Held-to-maturity:			
Gross realized gains on sales	1,518	8	14
Other-than-temporary impairment	—	—	(207)
Total gain (loss) on investment securities, net	$ (833)	$ 1,055	$ 821

The following table presents interest income on investment securities:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Interest income on tax-exempt securities	$296,958	$222,486	$165,281
Interest income on taxable securities	224,879	156,233	103,401
Total	$521,837	$378,719	$268,682

The following table presents 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.

	December 31, 2017		2016	
($ in thousands)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Available-for-sale:				
Due in one year or less	$ 55,465	$ 55,024	$ 55,674	$ 55,573
Due after one year through five years	314,796	315,614	70,390	70,048
Due after five years through ten years	1,183,278	1,185,208	919,092	919,990
Due after ten years	855,939	841,925	955,658	959,699
Total debt securities	$ 2,409,478	$ 2,397,771	$ 2,000,814	$ 2,005,310
Held-to-maturity:				
Due in one year or less	$ 160,597	$ 162,994	$ 89,209	$ 90,352
Due after one year through five years	699,546	741,423	453,318	485,759
Due after five years through ten years	571,893	582,245	303,894	318,848
Due after ten years	14,725,909	15,016,083	12,303,736	12,258,902
Total debt securities	$16,157,945	$16,502,745	$13,150,157	$13,153,861

Note 3. Loans and Allowance for Loan Losses

Loan Profile

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 December 31, 2017 and 2016, approximately 51% and 52%, respectively, of the total loan portfolio was secured by California real estate. At December 31, 2017, approximately 69% of single family mortgages fully and evenly amortize until maturity following an initial interest-only period of generally ten years, compared to 71% at December 31, 2016.

The following table presents the recorded investment in the Bank's loan portfolio and allowance for loan losses:

($ in thousands)	December 31, 2017	December 31, 2016
Single family (1-4 units)	$31,508,468	$26,266,866
Home equity lines of credit	2,735,612	2,634,944
Multifamily (5+ units)	8,640,233	6,676,642
Commercial real estate	6,083,152	5,464,870
Single family construction	591,066	494,616
Multifamily/commercial construction	1,116,855	919,541
Total real estate mortgages	50,675,386	42,457,479
Business	8,295,224	6,872,327
Stock secured	1,083,553	822,908
Other secured	1,015,039	723,648
Unsecured	1,771,013	1,131,955
Total other loans	12,164,829	9,550,838
Total loans	62,840,215	52,008,317
Less:		
Allowance for loan losses	(365,932)	(306,398)
Loans, net	62,474,283	51,701,919
Single family loans held for sale	87,695	407,226
Total	$62,561,978	$52,109,145

The Bank had pledged $32.0 billion and $27.4 billion of loans to secure borrowings of $8.4 billion and $5.9 billion from the FHLB as of December 31, 2017 and 2016, respectively, although only approximately $9.6 billion and $6.7 billion of collateral, respectively, was required in connection with the outstanding FHLB advances at each of these dates.

Credit Quality

The Bank has three classes of loans: (1) purchased non-impaired loans; (2) originated non-impaired loans; and (3) impaired loans, which include both purchased and originated non-impaired loans that subsequently became impaired under ASC 310-10-35, and purchased credit-impaired loans subject to ASC 310-30, "Receivables—Loans and Debt Securities Acquired with Deteriorated Credit Quality."

A loan is considered past due if the required principal and interest payment has not been received as of the day after such payment was due. The tables below present an aging analysis of loans and loans on nonaccrual status by class. Of the loans on nonaccrual status, at December 31, 2017, $21.5 million were current, compared to $29.0 million at December 31, 2016.

($ in thousands)	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Total Loans	90 Days or More Past Due and Accruing	Nonaccrual
At December 31, 2017								
Single Family (1-4 units):								
Purchased non-impaired	$ 596	$1,706	$ —	$ 2,302	$ 1,374,793	$ 1,377,095	$—	$ 631
Originated non-impaired	371	—	166	537	30,104,977	30,105,514	—	1,070
Impaired	—	—	10,216	10,216	15,643	25,859	—	15,196
	967	1,706	10,382	13,055	31,495,413	31,508,468	—	16,897
Home Equity Lines of Credit:								
Purchased non-impaired	246	—	—	246	238,348	238,594	—	918
Originated non-impaired	6,105	—	474	6,579	2,477,605	2,484,184	—	474
Impaired	2,553	1,119	1,605	5,277	7,557	12,834	—	7,193
	8,904	1,119	2,079	12,102	2,723,510	2,735,612	—	8,585
Multifamily (5+ units):								
Purchased non-impaired	—	—	—	—	116,822	116,822	—	—
Originated non-impaired	—	—	—	—	8,508,385	8,508,385	—	—
Impaired	—	—	—	—	15,026	15,026	—	4,651
	—	—	—	—	8,640,233	8,640,233	—	4,651
Commercial Real Estate:								
Purchased non-impaired	—	—	—	—	201,202	201,202	—	—
Originated non-impaired	—	—	—	—	5,868,912	5,868,912	—	286
Impaired	—	—	—	—	13,038	13,038	—	—
	—	—	—	—	6,083,152	6,083,152	—	286
Single Family Construction:								
Purchased non-impaired	2,914	—	—	2,914	—	2,914	—	—
Originated non-impaired	—	—	—	—	588,152	588,152	—	—
	2,914	—	—	2,914	588,152	591,066	—	—
Multifamily/Commercial Construction:								
Purchased non-impaired	—	—	—	—	1,167	1,167	—	—
Originated non-impaired	—	—	—	—	1,115,688	1,115,688	—	—
	—	—	—	—	1,116,855	1,116,855	—	—
Business:								
Purchased non-impaired	23	—	—	23	153,462	153,485	—	129
Originated non-impaired	1,638	1,799	—	3,437	8,128,329	8,131,766	—	620
Impaired	—	—	—	—	9,973	9,973	—	5,016
	1,661	1,799	—	3,460	8,291,764	8,295,224	—	5,765
Stock Secured:								
Purchased non-impaired	—	—	—	—	3,578	3,578	—	—
Originated non-impaired	—	—	—	—	1,079,975	1,079,975	—	—
	—	—	—	—	1,083,553	1,083,553	—	—
Other Secured:								
Purchased non-impaired	—	—	—	—	7,941	7,941	—	—
Originated non-impaired	—	—	—	—	1,007,098	1,007,098	—	—
	—	—	—	—	1,015,039	1,015,039	—	—
Unsecured:								
Purchased non-impaired	—	—	—	—	27,476	27,476	—	314
Originated non-impaired	4	—	—	4	1,742,608	1,742,612	—	250
Impaired	—	—	—	—	925	925	—	908
	4	—	—	4	1,771,009	1,771,013	—	1,472
Total	$14,450	$4,624	$12,461	$31,535	$62,808,680	$62,840,215	$—	$37,656

($ in thousands)	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current	Total Loans	90 Days or More Past Due and Accruing	Nonaccrual
At December 31, 2016								
Single Family (1-4 units):								
Purchased non-impaired	$ —	$ —	$ 900	$ 900	$ 1,782,497	$ 1,783,397	$—	$ 1,566
Originated non-impaired	233	—	—	233	24,444,726	24,444,959	—	—
Impaired	—	962	14,202	15,164	23,346	38,510	—	22,994
	233	962	15,102	16,297	26,250,569	26,266,866	—	24,560
Home Equity Lines of Credit:								
Purchased non-impaired	200	512	1,321	2,033	306,524	308,557	—	1,506
Originated non-impaired	—	—	—	—	2,311,998	2,311,998	—	—
Impaired	—	—	2,404	2,404	11,985	14,389	—	8,958
	200	512	3,725	4,437	2,630,507	2,634,944	—	10,464
Multifamily (5+ units):								
Purchased non-impaired	—	—	—	—	150,905	150,905	—	—
Originated non-impaired	—	—	—	—	6,505,882	6,505,882	—	—
Impaired	—	—	—	—	19,855	19,855	—	4,516
	—	—	—	—	6,676,642	6,676,642	—	4,516
Commercial Real Estate:								
Purchased non-impaired	—	—	—	—	267,801	267,801	—	—
Originated non-impaired	—	—	—	—	5,185,319	5,185,319	—	306
Impaired	—	—	—	—	11,750	11,750	—	—
	—	—	—	—	5,464,870	5,464,870	—	306
Single Family Construction:								
Purchased non-impaired	—	2,922	—	2,922	—	2,922	—	—
Originated non-impaired	—	—	—	—	491,694	491,694	—	—
	—	2,922	—	2,922	491,694	494,616	—	—
Multifamily/Commercial Construction:								
Purchased non-impaired	—	—	—	—	1,167	1,167	—	—
Originated non-impaired	—	—	—	—	918,374	918,374	—	—
	—	—	—	—	919,541	919,541	—	—
Business:								
Purchased non-impaired	—	—	—	—	289,101	289,101	—	1,293
Originated non-impaired	—	—	—	—	6,568,801	6,568,801	—	1,515
Impaired	—	—	—	—	14,425	14,425	—	5,920
	—	—	—	—	6,872,327	6,872,327	—	8,728
Stock Secured:								
Purchased non-impaired	—	—	—	—	3,866	3,866	—	—
Originated non-impaired	—	—	—	—	819,042	819,042	—	—
	—	—	—	—	822,908	822,908	—	—
Other Secured:								
Purchased non-impaired	—	—	—	—	10,501	10,501	—	—
Originated non-impaired	—	—	—	—	713,147	713,147	—	—
	—	—	—	—	723,648	723,648	—	—
Unsecured:								
Purchased non-impaired	26	—	—	26	24,416	24,442	—	386
Originated non-impaired	1	—	—	1	1,106,959	1,106,960	—	60
Impaired	—	—	—	—	553	553	—	—
	27	—	—	27	1,131,928	1,131,955	—	446
Total	$460	$4,396	$18,827	$23,683	$51,984,634	$52,008,317	$—	$49,020

The interest income related to nonaccrual loans at each respective period end is presented in the following table:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Actual interest income recognized	$ —	$ —	$ —
Interest income under original terms	$ 1,565	$ 2,089	$ 2,007

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

We perform annual reviews of our larger multifamily, commercial real estate and commercial business loans. As part of these review procedures, we analyze recent financial statements of the property and/or borrower to determine the current level of occupancy, revenues and expenses and to investigate any deterioration in the value of the real estate collateral or in the borrower's financial condition. Upon completion, we update the grade assigned to each loan. We maintain a list of loans that receive additional attention if we believe there may be a potential credit risk.

For loans that are criticized or classified, the Bank's Special Assets Committee reviews loan grades, reserves and accrual status on a quarterly or more frequent basis. This review includes an evaluation of the market conditions, the property's trends, the borrower and guarantor status, the level of reserves required and loan accrual status. Additionally, we have an independent, third-party review performed on our loan grades and our credit administration functions each year. The results of the third-party review are presented to the Audit Committee of the Board of Directors. These asset review procedures provide management with additional information for assessing our asset quality. In addition, for business and personal loans that are not secured by real estate, we perform frequent evaluations and regular monitoring.

The Special Assets Committee is primarily responsible for review of loan grades, reserves and accrual status. Adversely classified loan asset grades are reviewed on a quarterly or more frequent basis. 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 following tables present the recorded investment in loans, by credit quality indicator and by class:

($ in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At December 31, 2017					
Single Family (1-4 units):					
Purchased non-impaired	$ 1,360,496	$ 3,927	$ 12,672	$ —	$ 1,377,095
Originated non-impaired	30,090,559	2,474	12,481	—	30,105,514
Impaired	9,856	162	15,841	—	25,859
	31,460,911	6,563	40,994	—	31,508,468
Home Equity Lines of Credit:					
Purchased non-impaired	229,732	6,964	1,898	—	238,594
Originated non-impaired	2,482,189	764	1,231	—	2,484,184
Impaired	769	766	11,299	—	12,834
	2,712,690	8,494	14,428	—	2,735,612
Multifamily (5+ units):					
Purchased non-impaired	116,822	—	—	—	116,822
Originated non-impaired	8,502,516	5,869	—	—	8,508,385
Impaired	10,235	—	4,791	—	15,026
	8,629,573	5,869	4,791	—	8,640,233
Commercial Real Estate:					
Purchased non-impaired	192,907	—	8,295	—	201,202
Originated non-impaired	5,839,741	11,415	17,756	—	5,868,912
Impaired	8,538	—	4,500	—	13,038
	6,041,186	11,415	30,551	—	6,083,152
Single Family Construction:					
Purchased non-impaired	—	—	2,914	—	2,914
Originated non-impaired	587,153	999	—	—	588,152
	587,153	999	2,914	—	591,066
Multifamily/Commercial Construction:					
Purchased non-impaired	—	—	1,167	—	1,167
Originated non-impaired	1,115,688	—	—	—	1,115,688
	1,115,688	—	1,167	—	1,116,855
Business:					
Purchased non-impaired	151,435	366	1,555	129	153,485
Originated non-impaired	8,057,791	12,818	61,157	—	8,131,766
Impaired	—	4,913	5,060	—	9,973
	8,209,226	18,097	67,772	129	8,295,224
Stock Secured:					
Purchased non-impaired	3,578	—	—	—	3,578
Originated non-impaired	1,079,975	—	—	—	1,079,975
	1,083,553	—	—	—	1,083,553
Other Secured:					
Purchased non-impaired	7,941	—	—	—	7,941
Originated non-impaired	1,006,849	249	—	—	1,007,098
	1,014,790	249	—	—	1,015,039
Unsecured:					
Purchased non-impaired	27,005	—	157	314	27,476
Originated non-impaired	1,739,163	—	3,199	250	1,742,612
Impaired	—	—	925	—	925
	1,766,168	—	4,281	564	1,771,013
Total	$ 62,620,938	$ 51,686	$ 166,898	$ 693	$ 62,840,215

($ in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At December 31, 2016					
Single Family (1-4 units):					
Purchased non-impaired	$ 1,767,392	$ 3,880	$ 12,125	$ —	$ 1,783,397
Originated non-impaired	24,429,290	3,418	12,251	—	24,444,959
Impaired	12,749	162	25,599	—	38,510
	26,209,431	7,460	49,975	—	26,266,866
Home Equity Lines of Credit:					
Purchased non-impaired	304,023	1,840	2,694	—	308,557
Originated non-impaired	2,311,449	549	—	—	2,311,998
Impaired	1,776	2,765	9,848	—	14,389
	2,617,248	5,154	12,542	—	2,634,944
Multifamily (5+ units):					
Purchased non-impaired	150,743	—	162	—	150,905
Originated non-impaired	6,486,437	17,986	1,459	—	6,505,882
Impaired	15,339	—	4,516	—	19,855
	6,652,519	17,986	6,137	—	6,676,642
Commercial Real Estate:					
Purchased non-impaired	246,331	1,047	20,423	—	267,801
Originated non-impaired	5,153,753	22,070	9,496	—	5,185,319
Impaired	10,968	—	782	—	11,750
	5,411,052	23,117	30,701	—	5,464,870
Single Family Construction:					
Purchased non-impaired	—	—	2,922	—	2,922
Originated non-impaired	491,694	—	—	—	491,694
	491,694	—	2,922	—	494,616
Multifamily/Commercial Construction:					
Purchased non-impaired	—	—	1,167	—	1,167
Originated non-impaired	918,374	—	—	—	918,374
	918,374	—	1,167	—	919,541
Business:					
Purchased non-impaired	278,474	4,406	5,670	551	289,101
Originated non-impaired	6,546,374	18,753	3,365	309	6,568,801
Impaired	7,007	1,437	5,981	—	14,425
	6,831,855	24,596	15,016	860	6,872,327
Stock Secured:					
Purchased non-impaired	3,866	—	—	—	3,866
Originated non-impaired	818,455	587	—	—	819,042
	822,321	587	—	—	822,908
Other Secured:					
Purchased non-impaired	10,501	—	—	—	10,501
Originated non-impaired	713,147	—	—	—	713,147
	723,648	—	—	—	723,648
Unsecured:					
Purchased non-impaired	24,007	—	49	386	24,442
Originated non-impaired	1,105,027	—	1,873	60	1,106,960
Impaired	538	—	15	—	553
	1,129,572	—	1,937	446	1,131,955
Total	$51,807,714	$78,900	$120,397	$1,306	$52,008,317

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

As of December 31, 2017 and 2016, the Bank did not have any residential real estate owned (acquired through foreclosure).

The carrying amount of residential mortgage loans in the process of foreclosure was $5.5 million and $5.0 million at December 31, 2017 and 2016, respectively.

Recent Developments

Recent wildfires and mudslides in the Northern California and Southern California regions affected certain of our borrowers. The Bank has currently identified loans with aggregate unpaid principal balances of approximately $70 million, primarily consisting of single family real estate secured loans, which have experienced damage to the underlying collateral as a result of the fires or mudslides. Such damage is generally insured, therefore, the Bank does not expect material losses related to these loans. The Bank's conservative underwriting practices, including low loan-to-value ratios, and the requirement for borrowers and property owners to maintain property insurance and other insurance coverage, as applicable, reduce its exposure to losses. The Bank continues to monitor and assess the impact of these events on its borrowers.

Allowance for Loan Losses

The Bank's allowance for loan losses is evaluated based on its three classes of loans: (1) purchased non-impaired loans; (2) originated non-impaired loans; and (3) impaired loans, which include both purchased and originated non-impaired loans that subsequently became impaired under ASC 310-10-35, and purchased credit-impaired loans subject to ASC 310-30.

Purchased non-impaired loans are monitored to determine if these loans have experienced a deterioration in credit quality based upon their payment status and loan grade. If a deterioration in credit quality has occurred, the Bank evaluates the estimated loss content in the individual loan as compared to the loan's current carrying value, which includes any related purchase accounting discount.

Originated non-impaired loans are collectively evaluated for estimated losses in accordance with ASC 450, "Contingencies," based on groups of loans with similar risk characteristics that align with the loan portfolio segments. The Bank has maintained an allowance for loan loss model that computes loss factors for each segment based upon our historical losses and current portfolio trends.

Any purchased non-impaired and originated non-impaired loans that subsequently became impaired are evaluated under ASC 310-10-35. If determined necessary, a specific reserve will be recorded for these loans. In addition, purchased credit-impaired loans are subject to a quarterly review of expected cash flows. These loans are generally evaluated quarterly by the Bank's Special Assets Committee, unless they have been upgraded to a pass loan. If there is further credit deterioration, an additional specific reserve will be recorded.

The Bank also maintains a qualitative reserve, which represents the qualitative portion of the allowance for loan losses. This qualitative reserve is determined based on management's assessments of the risks that may lead to a loan loss experience different than our historical loss experience and therefore not reflected in the quantitative model. The Bank uses qualitative factors that are intended to address developing external and internal environmental trends and include considerations such as changes in current economic and business conditions, the nature and volume of the Bank's loan portfolio, the existence and effects of credit concentrations, problem loan trends, along with other external factors, such as competition and the legal and regulatory environment. As of December 31, 2017 and 2016, the qualitative reserve is allocated to the individual loan portfolios. The allocation considers the qualitative factors relevant to each portfolio, the degree to which the relevant qualitative factors impacted each loan portfolio, and relative portfolio balances.

The following tables present an analysis of the allowance for loan losses:

($ in thousands)	Single Family (1-4 units)	Home Equity Lines of Credit	Multifamily (5+ units)	Commercial Real Estate	Single Family Construction	Multifamily/ Commercial Construction	Business	Stock Secured	Other Secured	Unsecured	Unallocated [1]	Total
At or for the Year Ended December 31, 2017												
Rollforward of allowance for loan losses:												
Balance at beginning of period	$ 40,787	$ 12,083	$ 53,373	$ 48,880	$ 2,112	$ 8,823	$ 118,874	$ 5,102	$ 5,822	$ 10,542	$—	$ 306,398
Provision (reversal of provision)	12,370	(356)	14,232	3,388	646	1,690	19,651	1,494	2,028	5,038	—	60,181
Charge-offs	(1,176)	(848)	—	—	—	—	(616)	—	—	(346)	—	(2,986)
Recoveries	30	2,167	—	—	—	—	47	—	—	95	—	2,339
Balance at end of period	$ 52,011	$ 13,046	$ 67,605	$ 52,268	$ 2,758	$ 10,513	$ 137,956	$ 6,596	$ 7,850	$ 15,329	$—	$ 365,932
Allowance for loan losses by impairment methodology:												
Purchased non-impaired	$ 839	$ 476	$ —	$ 484	$ 136	$ 3	$ 379	$ —	$ —	$ 354	$—	$ 2,671
Originated non-impaired	51,108	12,320	67,591	51,654	2,622	10,510	137,377	6,596	7,850	14,975	—	362,603
Impaired	64	250	14	130	—	—	200	—	—	—	—	658
Total	$ 52,011	$ 13,046	$ 67,605	$ 52,268	$ 2,758	$ 10,513	$ 137,956	$ 6,596	$ 7,850	$ 15,329	$—	$ 365,932
Recorded investment in loans:												
Purchased non-impaired	$ 1,377,095	$ 238,594	$ 116,822	$ 201,202	$ 2,914	$ 1,167	$ 153,485	$ 3,578	$ 7,941	$ 27,476		$ 2,130,274
Originated non-impaired	30,105,514	2,484,184	8,508,385	5,868,912	588,152	1,115,688	8,131,766	1,079,975	1,007,098	1,742,612		60,632,286
Impaired	25,859	12,834	15,026	13,038	—	—	9,973	—	—	925		77,655
Total	$31,508,468	$2,735,612	$8,640,233	$6,083,152	$591,066	$1,116,855	$8,295,224	$1,083,553	$1,015,039	$1,771,013		$62,840,215

[1] As of December 31, 2017, the qualitative reserve is allocated to the individual loan portfolios.

($ in thousands)	Single Family (1-4 units)	Home Equity Lines of Credit	Multifamily (5+ units)	Commercial Real Estate	Single Family Construction	Multifamily/ Commercial Construction	Business	Stock Secured	Other Secured	Unsecured	Unallocated [1]	Total
At or for the Year Ended December 31, 2016												
Rollforward of allowance for loan losses:												
Balance at beginning of period	$ 27,614	$ 5,530	$ 25,416	$ 24,690	$ 644	$ 4,218	$ 92,568	$ 1,809	$ 6,610	$ 6,918	$ 65,041	$ 261,058
Provision (reversal of provision)	14,852	6,722	27,957	24,190	1,468	4,605	26,282	3,293	(788)	3,652	(65,041)	47,192
Charge-offs	(1,694)	(272)	—	—	—	—	(93)	—	—	(57)	—	(2,116)
Recoveries	15	103	—	—	—	—	117	—	—	29	—	264
Balance at end of period	$ 40,787	$ 12,083	$ 53,373	$ 48,880	$ 2,112	$ 8,823	$ 118,874	$ 5,102	$ 5,822	$ 10,542	$ —	$ 306,398
Allowance for loan losses by impairment methodology:												
Purchased non-impaired	$ 619	$ 368	$ 13	$ 1,462	$ 133	$ 3	$ 1,694	$ —	$ —	$ 398	$ —	$ 4,690
Originated non-impaired	40,159	11,436	53,360	47,418	1,979	8,820	117,092	5,102	5,822	10,144	—	301,332
Impaired	9	279	—	—	—	—	88	—	—	—	—	376
Total	$ 40,787	$ 12,083	$ 53,373	$ 48,880	$ 2,112	$ 8,823	$ 118,874	$ 5,102	$ 5,822	$ 10,542	$ —	$ 306,398
Recorded investment in loans:												
Purchased non-impaired	$ 1,783,397	$ 308,557	$ 150,905	$ 267,801	$ 2,922	$ 1,167	$ 289,101	$ 3,866	$ 10,501	$ 24,442		$ 2,842,659
Originated non-impaired	24,444,959	2,311,998	6,505,882	5,185,319	491,694	918,374	6,568,801	819,042	713,147	1,106,960		49,066,176
Impaired	38,510	14,389	19,855	11,750	—	—	14,425	—	—	553		99,482
Total	$26,266,866	$2,634,944	$6,676,642	$5,464,870	$494,616	$919,541	$6,872,327	$822,908	$723,648	$1,131,955		$52,008,317
At or for the Year Ended December 31, 2015												
Rollforward of allowance for loan losses:												
Balance at beginning of period	$ 24,855	$ 5,344	$ 21,800	$ 19,891	$ 618	$ 2,941	$ 71,805	$ 984	$ 5,081	$ 4,145	$ 49,878	$ 207,342
Provision	2,816	1,769	3,616	4,799	26	1,277	20,808	825	1,529	2,811	15,163	55,439
Charge-offs	(146)	(1,632)	—	—	—	—	(95)	—	—	(169)	—	(2,042)
Recoveries	89	49	—	—	—	—	50	—	—	131	—	319
Balance at end of period	$ 27,614	$ 5,530	$ 25,416	$ 24,690	$ 644	$ 4,218	$ 92,568	$ 1,809	$ 6,610	$ 6,918	$ 65,041	$ 261,058

[1] As of December 31, 2016, the unallocated qualitative reserve is allocated to the individual loan portfolios.

Reserve for Unfunded Commitments

The Bank evaluates reserves for unfunded commitments for home equity lines of credit, single family construction, commercial real estate and multifamily lines of credit, multifamily/commercial construction, business lines of credit and secured/unsecured lines of credit. In determining the level of reserves, the Bank determines the probability of funding for each portfolio segment based on historical utilization statistics specific to that portfolio segment. Construction commitments are assumed to be fully funded, since the construction projects are expected to be completed. Additionally, for unfunded commitments, the Bank applies a loss factor that is consistent with that applied against the funded balance for each portfolio segment. The reserve for unfunded commitments was $14.2 million and $12.5 million at December 31, 2017 and 2016, respectively.

Impaired Loans

The following tables present information related to impaired loans:

	Total		With no related allowance recorded		With an allowance recorded		
($ in thousands)	Recorded Investment	Unpaid Principal Balance	Recorded Investment	Unpaid Principal Balance	Recorded Investment	Unpaid Principal Balance	Related Allowance
At December 31, 2017							
Single family (1-4 units)	$25,859	$ 26,307	$25,053	$25,491	$ 806	$ 816	$ 64
Home equity lines of credit	12,834	12,970	10,329	10,472	2,505	2,498	250
Multifamily (5+ units)	15,026	15,282	14,887	15,142	139	140	14
Commercial real estate	13,038	13,156	8,538	8,656	4,500	4,500	130
Business	9,973	10,972	5,060	6,009	4,913	4,963	200
Unsecured	925	1,057	925	1,057	—	—	—
Total	$77,655	$ 79,744	$64,792	$66,827	$12,863	$12,917	$658
At December 31, 2016							
Single family (1-4 units)	$38,510	$ 39,541	$34,102	$34,984	$ 4,408	$ 4,557	$ 9
Home equity lines of credit	14,389	14,575	9,488	9,654	4,901	4,921	279
Multifamily (5+ units)	19,855	20,445	19,855	20,445	—	—	—
Commercial real estate	11,750	12,357	11,750	12,357	—	—	—
Business	14,425	15,803	12,989	14,304	1,436	1,499	88
Unsecured	553	711	553	711	—	—	—
Total	$99,482	$103,432	$88,737	$92,455	$10,745	$10,977	$376

($ in thousands)	Year Ended December 31,					
	2017		2016		2015	
	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
Single family (1-4 units)	$33,416	$ 902	$ 39,018	$ 837	$ 41,458	$1,084
Home equity lines of credit	13,005	263	13,690	235	17,023	332
Multifamily (5+ units)	15,832	950	23,704	1,278	24,953	1,513
Commercial real estate	11,929	1,121	16,323	1,323	28,457	4,061
Multifamily/commercial construction	—	—	1,662	—	892	—
Business	11,821	623	23,858	1,126	26,290	1,405
Unsecured	1,113	59	553	55	641	36
Total	$87,116	$3,918	$118,808	$4,854	$139,714	$8,431

Troubled Debt Restructurings

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

($ in thousands)	At December 31, 2017			At December 31, 2016		
	Restructured - Nonaccrual	Restructured - Accruing	Total	Restructured - Nonaccrual	Restructured - Accruing	Total
At December 31, 2017						
Single Family (1-4 units):						
Purchased non-impaired	$ —	$ 479	$ 479	$ —	$ —	$ —
Impaired	3,398	4,112	7,510	5,330	8,857	14,187
	3,398	4,591	7,989	5,330	8,857	14,187
Home Equity Lines of Credit:						
Purchased non-impaired	—	—	—	—	267	267
Impaired	4,907	2,968	7,875	2,977	4,577	7,554
	4,907	2,968	7,875	2,977	4,844	7,821
Multifamily (5+ units):						
Purchased non-impaired	—	282	282	—	294	294
Commercial Real Estate:						
Purchased non-impaired	—	219	219	—	222	222
Impaired	—	4,500	4,500	—	—	—
	—	4,719	4,719	—	222	222
Business:						
Originated non-impaired	620	—	620	—	—	—
Impaired	5,016	45	5,061	5,904	61	5,965
	5,636	45	5,681	5,904	61	5,965
Unsecured:						
Impaired	802	—	802	—	—	—
Total	$14,743	$12,605	$27,348	$14,211	$14,278	$28,489

During the year ended December 31, 2017 and 2016, troubled debt restructurings were primarily modified through payment deferrals, extensions of the maturity date or reductions in interest rate, both temporary and permanent. The following table presents the recorded investment in loans modified in troubled debt restructurings during the periods indicated:

($ in thousands)	Year Ended December 31,		
	2017	2016	2015
Single Family (1-4 units):			
Purchased non-impaired	$ —	$ —	$ 750
Impaired	—	1,543	—
	—	1,543	750
Home Equity Lines of Credit:			
Purchased non-impaired	—	1,997	—
Impaired	4,724	—	—
	4,724	1,997	—
Multifamily (5+ units):			
Purchased non-impaired	—	—	747
Commercial Real Estate:			
Originated non-impaired	6,500	—	—
Business:			
Originated non-impaired	685	—	—
Impaired	—	4,799	—
	685	4,799	—
Unsecured:			
Originated non-impaired	843	—	—
Total	$12,752	$8,339	$1,497

The majority of the Bank's restructured loans are considered impaired and are evaluated individually for impairment under ASC 310-10-35. The resulting impairment, if any, would have an impact on the allowance for loan losses as a specific reserve and be measured under the same criteria as all other impaired loans. For those restructured loans that are purchased credit-impaired, any required allowance is evaluated based upon ASC 310-30. Certain restructured accruing loans may be deemed non-impaired and would therefore be evaluated for estimated losses under ASC 450. No loans defaulted during 2017, 2016 or 2015 that were modified in the previous twelve months.

Note 4. Mortgage Banking Activities

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

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

($ in thousands)	Year Ended December 31, 2017	2016	2015
Total loans originated	$27,633,219	$25,720,874	$19,671,962
Single family loans originated	$11,568,111	$10,615,621	$ 7,633,653
Loans sold:			
Flow sales:			
Agency	$ 131,111	$ 434,094	$ 273,128
Non-agency	309,482	323,454	402,300
Total flow sales	440,593	757,548	675,428
Bulk sales:			
Non-agency	2,436,584	2,389,879	1,753,832
Total loans sold	$ 2,877,177	$ 3,147,427	$ 2,429,260
Gain on sale of loans:			
Amount	$ 9,233	$ 4,828	$ 9,725
Gain as a percentage of loans sold	0.32%	0.15%	0.40%

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

($ in thousands)	At or for the Year Ended December 31, 2017	2016	2015
Loans serviced for others:			
Beginning balance	$ 11,655,453	$ 10,531,418	$ 9,590,361
Loans sold	2,877,177	3,147,427	2,429,260
Repayments	(2,003,276)	(2,018,384)	(1,473,282)
Loans purchased	(617)	(3,923)	(7,486)
Loans repurchased	(33,416)	(1,085)	(7,435)
Ending balance	$ 12,495,321	$ 11,655,453	$ 10,531,418
MSRs:			
Beginning balance	$ 62,410	$ 53,538	$ 49,023
Additions due to new loans sold	20,208	22,878	17,198
Amortization expense	(16,269)	(13,985)	(12,633)
Reductions due to purchases	(6)	(15)	(3)
Reductions due to repurchases	(204)	(6)	(47)
Ending balance	$ 66,139	$ 62,410	$ 53,538
Estimated fair value of MSRs	$ 93,009	$ 85,453	$ 80,604
MSRs as a percent of loans serviced	0.53%	0.54%	0.51%
Weighted average servicing fee collected for the period	0.25%	0.25%	0.25%
MSRs as a multiple of weighted average servicing fee	2.10x	2.13x	2.01x

There was no valuation allowance related to MSRs as of or during the years ended December 31, 2017, 2016 and 2015.

The following table presents loan servicing fees:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Contractually specified servicing fees	$30,069	$27,450	$25,673
Late charges and ancillary fees, net of costs	$ 827	$ 3,943	$ 3,746

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

($ in thousands)	December 31, 2017	2016
Fair value of MSRs	$93,009	$85,453
Weighted average prepayment speed (CPR)	13.1%	12.3%
Impact on fair value of 10% adverse change	$ (4,516)	$ (4,030)
Impact on fair value of 20% adverse change	$ (8,644)	$ (7,658)
Weighted average discount rate	13.1%	12.9%
Impact on fair value of 10% adverse change	$ (3,532)	$ (3,049)
Impact on fair value of 20% adverse change	$ (6,810)	$ (5,889)

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

Refer to Note 9, "Goodwill and Intangible Assets," for disclosures of the gross carrying value, accumulated amortization and estimated future amortization expense of MSRs.

Note 5. Variable Interest Entities

The Bank's involvement with VIEs includes its interests purchased in securitizations, tax credit investments and other investments.

In 2017, the securities related to VIEs in four REMICs (which were formed in 2000 through 2002), were redeemed and these VIEs are no longer consolidated. Previously, these REMICs were consolidated since the Bank was the primary beneficiary. As of December 31, 2017 and 2016, the Bank held variable interests in one other REMIC (formed in 2001) sponsored by the Bank, which is not consolidated. The debt holders of this REMIC have no recourse to the Bank.

The Bank also has variable interests in low income housing tax credit funds that are designed to generate a return primarily through the realization of federal tax credits. These investments are typically limited partnerships in which the general partner, other than the Bank, holds the power over significant activities of the VIE. Since the Bank is not the primary beneficiary of these investments, it does not consolidate these interests.

In addition, as of December 31, 2017 and 2016, the Bank has variable interests in other investments, which are accounted for under the cost method and equity method. Since the Bank is not the primary beneficiary of these investments, it does not consolidate these investments.

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

($ in thousands)	VIEs Not consolidated	VIEs Consolidated	Total
December 31, 2017			
Assets:			
Investment securities held-to-maturity	$ 1,631	$ —	$ 1,631
Tax credit investments	1,107,546	—	1,107,546
Other investments	19,560	—	19,560
Total Assets	1,128,737	—	1,128,737
Liabilities:			
Unfunded commitments—tax credit investments	431,132	—	431,132
Unfunded commitments—other investments	3,991	—	3,991
Total Liabilities	435,123	—	435,123
Net Assets	$ 693,614	$ —	$ 693,614
December 31, 2016			
Assets:			
Investment securities held-to-maturity	$ 1,875	$ —	$ 1,875
Loans	—	48,215	48,215
Tax credit investments	1,121,416	—	1,121,416
Other investments	6,932	—	6,932
Total Assets	1,130,223	48,215	1,178,438
Liabilities:			
Debt	—	25,973	25,973
Unfunded commitments—tax credit investments	534,349	—	534,349
Unfunded commitments—other investments	3,318	—	3,318
Total Liabilities	537,667	25,973	563,640
Net Assets	$ 592,556	$22,242	$ 614,798

The Bank's exposure to loss with respect to VIEs that are not consolidated would be equal to the Bank's investment in these assets of $1.1 billion at both December 31, 2017 and 2016.

Note 6. Tax Credit Investments

The Bank invests in low income housing tax credit funds that are designed to generate a return primarily through the realization of federal tax credits. The cost of tax credit investments is amortized over the life of the investment using a proportional amortization method and tax credit investment amortization expense is a component of provision for income taxes.

The following table presents the balances of the Bank's tax credit investments and related unfunded commitments:

($ in thousands)	December 31, 2017	December 31, 2016
Tax credit investments	$1,107,546	$1,121,416
Unfunded commitments—tax credit investments	$ 431,132	$ 534,349

The unfunded commitments related to tax credit investments are estimated to be funded as follows:

($ in thousands)	December 31, 2017
Unfunded commitments—tax credit investments:	
2018	$217,872
2019	131,224
2020	30,636
2021	4,043
2022	7,180
2023 and thereafter	40,177
Total	$431,132

The following table presents other information related to the Bank's tax credit investments:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Tax credits and other tax benefits recognized	$163,072	$135,060	$108,495
Tax credit amortization expense included in provision for income taxes	$120,994	$103,363	$ 78,991

The Bank did not recognize any impairment losses on tax credit investments during 2017, 2016 or 2015.

Note 7. Prepaid Expenses and Other Assets

Prepaid expenses and other assets are summarized in the table below:

($ in thousands)	December 31, 2017	December 31, 2016
Interest receivable	$ 290,210	$225,313
FHLB stock, at cost	282,150	160,650
Deferred tax assets	237,700	234,055
Current taxes receivable, net	79,326	7,086
Other prepaid expenses and assets	365,334	296,220
Total	$1,254,720	$923,324

Dividend income on FHLB stock was $14.9 million in 2017, compared to $19.3 million in 2016 and $27.5 million in 2015. The dividend income in 2016 and 2015 includes special dividends from the FHLB of $5.9 million and $9.1 million, respectively.

Note 8. Premises, Equipment and Leasehold Improvements

Premises, equipment and leasehold improvements are summarized in the table below:

	December 31, 2017			December 31, 2016		
($ in thousands)	Cost	Accumulated Depreciation and Amortization	Carrying Value	Cost	Accumulated Depreciation and Amortization	Carrying Value
Land, buildings and improvements	$ 2,795	$ (1,028)	$ 1,767	$ 1,320	$ (957)	$ 363
Furniture and equipment	177,212	(123,411)	53,801	143,102	(102,609)	40,493
Leasehold improvements	253,446	(134,000)	119,446	214,886	(112,510)	102,376
Software	169,906	(48,723)	121,183	82,094	(17,734)	64,360
Premises, equipment and leasehold improvements, net	$603,359	$(307,162)	$296,197	$441,402	$(233,810)	$207,592

Depreciation and amortization expense was $76.3 million in 2017, $50.2 million in 2016 and $45.4 million in 2015.

Rent and related occupancy expense, net of sublease income, was $83.1 million in 2017, $71.0 million in 2016 and $59.8 million in 2015.

Future minimum rental payments contractually required under operating leases, net of sublease income, including the Bank's office facilities that have initial or remaining noncancelable terms in excess of one year, were as follows:

($ in thousands)	December 31, 2017
Operating leases:	
2018	$ 77,597
2019	84,813
2020	80,609
2021	71,355
2022	68,518
2023 and thereafter	294,985
Total	$677,877

Many of our leases contain renewal options, escalation clauses or periodic adjustments of rent expense based on changes in various market indices.

Note 9. Goodwill and Intangible Assets

The following table presents the Bank's intangible assets and goodwill:

	December 31,					
	2017			2016		
($ in thousands)	Gross Carrying Value	Accumulated Amortization	Carrying Value	Gross Carrying Value	Accumulated Amortization	Carrying Value
Intangible assets:						
Customer relationship intangibles	$133,100	$ (89,834)	$43,266	$133,100	$ (74,490)	$ 58,610
Core deposit intangibles	87,550	(81,942)	5,608	87,550	(76,661)	10,889
Trade name	42,900	—	42,900	42,900	—	42,900
Intangible assets (excluding MSRs)	$263,550	$(171,776)	$91,774	$263,550	$(151,151)	$112,399
MSRs, before valuation allowance [1]	$137,196	$ (71,057)	$66,139	$117,478	$ (55,068)	$ 62,410
Goodwill	$198,447			$203,177		

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

Refer to Note 4, "Mortgage Banking Activities," for further discussion on MSRs.

The following table presents goodwill by business segment:

($ in thousands)	Commercial Banking	Wealth Management	Total
Balance as of December 31, 2015	$ 24,604	$ 147,012	$ 171,616
Gradifi acquisition	31,561	—	31,561
Balance as of December 31, 2016	56,165	147,012	203,177
Gradifi acquisition adjustment	(4,730)	—	(4,730)
Balance as of December 31, 2017	$ 51,435	$ 147,012	$ 198,447

The Bank is required to test goodwill for impairment at least annually at the reporting unit level. The Bank did not recognize any impairment in 2017, 2016 or 2015 based on the results of the annual test.

The following table presents the estimated future amortization for amortizable intangible assets as of December 31, 2017. The projections of amortization expense are based on existing asset balances as of December 31, 2017. Future amortization expense may vary from these projections.

($ in thousands)	Customer relationship intangibles	Core deposit intangibles	MSRs
2018	$ 12,703	$ 3,545	$ 13,889
2019	10,063	1,809	10,972
2020	7,504	254	8,668
2021	5,527	—	6,848
2022	3,671	—	5,410

Note 10. Deposits

Total deposits were $68.9 billion at December 31, 2017, and were comprised of noninterest-bearing deposits of $26.4 billion and interest-bearing deposits of $42.5 billion. At December 31, 2016, total deposits were $58.6 billion, and consisted of noninterest-bearing deposits of $22.7 billion and interest-bearing deposits of $35.9 billion. At December 31, 2017, approximately 1% of our deposit relationships hold approximately 48% of total deposits, compared to 46% at December 31, 2016.

At December 31, 2017, the annual contractual maturities of the Bank's certificates of deposit ("CDs") were as follows:

($ in thousands)	December 31, 2017
CDs:	
2018	$ 4,881,327
2019	1,569,819
2020	459,724
2021	157,855
2022	104,945
2023 and thereafter	61,124
Total	$ 7,234,794

At December 31, 2017, CDs of greater than $250,000 totaled $3.5 billion, or 5% of total deposits, compared to $2.2 billion, or 4% of total deposits, at December 31, 2016.

The following table presents interest expense on deposits:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Interest-bearing checking	$ 10,818	$ 3,703	$ 1,282
Money market checking	30,199	7,803	3,026
Money market savings and passbooks	15,653	7,502	5,964
CDs	78,116	54,757	50,800
Total	$ 134,786	$ 73,765	$ 61,072

Note 11. 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, securities sold under agreements to repurchase, 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:

			Interest Expense		
	December 31,		Year Ended December 31,		
($ in thousands)	2017	2016	2017	2016	2015
Short-term borrowings:					
Federal funds purchased	$ —	$ —	$ 3	$ 11	$ 5
FHLB advances	100,000	—	6,810	1,644	119
Securities sold under agreements to repurchase	—	100,000	788	1,656	752
Total	100,000	100,000	7,601	3,311	876
Long-term debt:					
FHLB advances	8,300,000	5,900,000	105,272	68,487	74,686
Senior notes [(1)]	894,723	397,955	17,883	10,295	10,276
Subordinated notes [(1)]	777,084	387,380	34,197	7,377	—
Total	9,971,807	6,685,335	157,352	86,159	84,962
Other long-term debt:					
Debt related to VIEs	—	25,973	416	476	519
Total borrowings	$ 10,071,807	$ 6,811,308	$ 165,369	$ 89,946	$ 86,357

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

FHLB Advances

FHLB advances may be either adjustable-rate in nature or fixed for a specific term. At December 31, 2017, the Bank had short-term FHLB advances of $100.0 million. At December 31, 2017, all of the long-term FHLB advances were fixed-rate for a specific term. At December 31, 2017, the contractual maturities and weighted average contractual rates of long-term FHLB advances were as follows:

	December 31, 2017	
($ in thousands)	Amount	Rate
FHLB advances maturing in:		
2018	$ 2,800,000	1.45%
2019	3,300,000	1.54%
2020	1,800,000	1.70%
2021	400,000	1.87%
2022	—	—%
Total	$ 8,300,000	1.56%

In connection with outstanding FHLB advances, the Bank owned FHLB stock of $282.2 million and $160.7 million at December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, the Bank was required to own FHLB stock at least equal to 2.7% of outstanding FHLB advances.

Senior Notes and Subordinated Notes

The following table presents the carrying values, coupon rates and maturity dates of the Bank's unsecured, term, fixed-rate senior notes and subordinated notes as of December 31, 2017:

	December 31, 2017		
($ in thousands)	Carrying Value [1]	Rate	Maturity Date
Senior notes:			
Fixed rate, issued June 2014	$ 398,770	2.375%	June 2019
Fixed rate, issued June 2017	$ 495,953	2.500%	June 2022
Subordinated notes:			
Fixed rate, issued August 2016	$ 387,590	4.375%	August 2046
Fixed rate, issued February 2017	$ 389,494	4.625%	February 2047

(1) Principal balance, net of unamortized issuance discounts and deferred issuance costs.

Note 12. Derivative Financial Instruments

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

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

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

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

	December 31,					
	2017			2016		
		Fair Value			Fair Value	
($ in thousands)	Notional or Contractual Amount	Derivative Assets [1]	Derivative Liabilities [2]	Notional or Contractual Amount	Derivative Assets [1]	Derivative Liabilities [2]
Foreign exchange contracts	$ 1,884,142	$ 23,170	$ 15,780	$ 1,425,576	$ 20,048	$ 18,588
Interest rate contracts with borrowers	$ 34,099	11	91	$ 80,670	1	628
Forward loan sale commitments	$ 121,556	91	11	$ 489,818	628	1
Total		$ 23,272	$ 15,882		$ 20,677	$ 19,217

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

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

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

	Total	Contracts Not Subject to Master Netting Arrangements	Contracts Subject to Master Netting Arrangements					
						Gross Amounts Not Offset on the Balance Sheet		
($ in thousands)	Gross Amounts Recognized	Gross Amounts Recognized	Gross Amounts Recognized	Gross Amounts Offset on the Balance Sheet	Net Amounts Presented on the Balance Sheet	Derivative Amount	Cash Collateral [1]	Net Amount
December 31, 2017								
Derivative assets:								
Foreign exchange contracts	$ 23,170	$ 14,471	$ 8,699	$—	$ 8,699	$ 8,699	$ —	$—
Derivative liabilities:								
Foreign exchange contracts	$ 15,780	$ 2,404	$ 13,376	$—	$ 13,376	$ 8,699	$ 4,677	$—
December 31, 2016								
Derivative assets:								
Foreign exchange contracts	$ 20,048	$ 7,953	$ 12,095	$—	$ 12,095	$ 8,400	$ 3,695	$—
Derivative liabilities:								
Foreign exchange contracts	$ 18,588	$ 10,188	$ 8,400	$—	$ 8,400	$ 8,400	$ —	$—

(1) Cash 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 13. 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," the Bank bases its fair values on 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. Securities available-for-sale and derivative instruments are recorded at fair value on a recurring basis. Additionally, from time to time, the Bank may be required to record other assets at fair value on a nonrecurring basis, which typically involve application of the lower-of-cost-or-market accounting or write-downs of individual assets. 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. Nonrecurring fair value adjustments of real estate secured mortgages represent a write-down based on the fair value of the underlying collateral of the loan, adjusted for certain factors such as estimated costs to sell and current market conditions.

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 investment securities: The Bank's U.S. Treasury securities, mutual funds and marketable equity securities are valued using quoted market prices from the active exchange on which the securities are traded. Mutual funds are valued using the net asset value ("NAV") per share using quoted market prices. For most other investment securities, the Bank uses quoted prices obtained through third-party valuation sources. Management reviews the valuation techniques and assumptions used by the providers to ensure that such valuation techniques are based on observable market inputs appropriate for the type of security being measured. In some instances, prices are obtained from dealer quotes. The fair value of tax-exempt nonprofit debentures and certain municipal securities is determined using estimated future cash flows or other model-based valuation methods using inputs similar to market pricing, adjusted for liquidity risk.

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

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

($ in thousands)	Level 1	Level 2	Level 3	Total
December 31, 2017				
Assets:				
Investment securities available-for-sale:				
U.S. Treasury securities	$ 54,998	$ —	$ —	$ 54,998
Agency residential MBS	—	34,574	—	34,574
Other residential MBS	—	4,860	—	4,860
Agency commercial MBS	—	2,255,890	—	2,255,890
Securities of U.S. states and political subdivisions—taxable	—	—	47,449	47,449
Mutual funds and marketable equity securities	20,317	—	—	20,317
Derivative assets	—	23,272	—	23,272
Total	$ 75,315	$ 2,318,596	$ 47,449	$ 2,441,360
Liabilities:				
Derivative liabilities	$ —	$ 15,882	$ —	$ 15,882
December 31, 2016				
Assets:				
Investment securities available-for-sale:				
U.S. Treasury securities	$ 111,029	$ —	$ —	$ 111,029
Agency residential MBS	—	48,229	—	48,229
Other residential MBS	—	7,662	—	7,662
Agency commercial MBS	—	1,790,897	—	1,790,897
Securities of U.S. states and political subdivisions—taxable	—	—	47,493	47,493
Marketable equity securities	1,948	—	—	1,948
Derivative assets	—	20,677	—	20,677
Total	$ 112,977	$ 1,867,465	$ 47,493	$ 2,027,935
Liabilities:				
Derivative liabilities	$ —	$ 19,217	$ —	$ 19,217

There were no transfers in or out of Levels 1, 2 or 3 assets measured at fair value on a recurring basis in the years ended December 31, 2017, 2016 or 2015.

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

	Year Ended December 31,		
($ in thousands)	2017	2016	2015
Available-for-sale securities of U.S. states and political subdivisions—taxable:			
Balance at beginning of period	$47,493	$47,436	$47,521
Unrealized gains (losses) included in other comprehensive income	(55)	48	(92)
Accretion included in interest income	11	9	7
Balance at end of period	$47,449	$47,493	$47,436

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

($ in thousands)	Fair Value	Valuation Technique	Unobservable Input
December 31, 2017			
Available-for-sale securities of U.S. states and political subdivisions—taxable	$47,449	Discounted cash flow	Weighted average liquidity risk yield premium of 50 bps
December 31, 2016			
Available-for-sale securities of U.S. states and political subdivisions—taxable	$47,493	Discounted cash flow	Weighted average liquidity risk yield premium of 50 bps

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

Nonrecurring Fair Value Measurements

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

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

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

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

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

The following table presents the assets measured at fair value on a nonrecurring basis that were held on the balance sheet at December 31, 2017 and 2016:

($ in thousands)	Level 1	Level 2	Level 3	Total
December 31, 2017				
Real estate secured mortgages	$—	$—	$1,078	$1,078
December 31, 2016				
Real estate secured mortgages	$—	$—	$9,116	$9,116

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

($ in thousands)	Year Ended December 31, 2017	2016	2015
Real estate secured mortgages	$(48)	$(676)	$(1,521)

Fair Value of Financial Instruments

The following is a description of valuation methodologies used for estimating the fair value of financial instruments presented in the tables below.

Cash and cash equivalents: The current carrying amount approximates estimated fair value.

Held-to-maturity investment securities: The Bank uses quoted prices obtained through third-party valuation sources for its held-to-maturity securities. Management reviews the valuation techniques and assumptions used by the providers to ensure that such valuation techniques are based on observable market inputs appropriate for the type of security being measured. In some instances, prices are obtained from dealer quotes. The fair value of tax-exempt nonprofit debentures and certain municipal securities is determined using estimated future cash flows or other model-based valuation methods using inputs similar to market pricing, adjusted for liquidity risk.

Loans: To estimate fair value of the Bank's loans, which are primarily adjustable-rate and intermediate-fixed rate real estate secured mortgages, the Bank segments each loan collateral type into categories based on fixed or adjustable interest rate terms (index, margin, current rate and time to next adjustment), maturity and estimated credit risk.

The Bank bases the fair value of single family loans on market prices adjusted for estimated credit risk. The fair value of multifamily and commercial real estate mortgages is primarily based upon prices of loans with similar terms obtained by or quoted to the Bank and adjusted for estimated credit risk. The Bank estimates the fair value of other loans using a discounted cash flow model based on the current interest rates at which similar loans would be made to borrowers with similar credit characteristics in the Bank's lending activities. Assumptions regarding liquidity risk and credit risk are determined by the Bank using available market and internal information.

For the fair value of nonaccrual loans and certain other loans, the Bank considers the individual characteristics of the loans, including delinquency status and the results of the Bank's internal loan grading process.

Loans held for sale: The carrying amount of loans held for sale reflects the lower of cost or market, including net deferred loan fees and costs. The fair value of loans held for sale is derived from actual prices at which loans were committed for sale adjusted for loan servicing value.

Investments in life insurance: The carrying amount of investments in life insurance reflects the total cash surrender value of each policy, which approximates fair value.

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

FHLB stock: FHLB stock has no trading market, is required as part of membership and is redeemable at par. FHLB stock is recorded at cost, which approximates fair value.

Deposits: The fair value of deposits with no stated maturity, such as demand deposit accounts, money market accounts and passbook accounts, approximates the carrying amount reported on the balance sheet. The intangible value of long-term relationships with depositors is not taken into account in estimating the fair values disclosed. Management believes that the Bank's non-term accounts, as a continuing source of less costly funds, provide significant additional value to the Bank that is not reflected in the assigned value. The fair value of certificates of deposit, which have a stated maturity, is based on the present value of contractual cash flows discounted by the replacement rates for deposits with similar remaining maturities.

Short-term FHLB advances: The fair value of short-term FHLB advances approximates the carrying amount reported on the balance sheet due to the short time between the origination of the instrument and its expected maturity.

Securities sold under agreements to repurchase: The estimated fair value of securities sold under agreements to repurchase represents the present value of cash flows discounted using interest rates that approximate those offered for borrowings with similar maturities and collateral requirements.

Long-term FHLB advances: The estimated fair value of long-term FHLB advances represents the present value of cash flows discounted using the FHLB's fixed-rate cost of funds curve for advances of the same type and with the same characteristics.

Senior notes, subordinated notes and debt related to VIEs: The fair value is based on the most recent quoted market price for each issue.

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:

	December 31, 2017				
		Fair Value			
($ in thousands)	Carrying Amount	Total	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 2,297,021	$ 2,297,021	$2,297,021	$ —	$ —
Investment securities held-to-maturity:					
U.S. Government-sponsored agency securities	1,400,025	1,354,936	—	1,354,936	—
Agency residential MBS	2,734,819	2,698,045	—	2,698,045	—
Other residential MBS	1,631	1,654	—	1,654	—
Agency commercial MBS	3,017,012	2,944,282	—	2,944,282	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	8,804,924	9,289,702	—	9,181,038	108,664
Tax-exempt nonprofit debentures	146,529	150,527	—	—	150,527
Taxable municipal securities	53,005	63,599	—	63,599	—
Loans, net:					
Real estate secured mortgages	50,477,185	48,770,074	—	30,634,418	18,135,656
Other loans	11,997,098	11,125,170	—	—	11,125,170
Loans held for sale	87,695	87,989	—	87,989	—
Investments in life insurance	1,330,652	1,330,652	—	—	1,330,652
MSRs	66,139	93,009	—	—	93,009
FHLB stock	282,150	282,150	—	—	282,150
Liabilities:					
Deposits:					
Deposits with no maturity	$61,683,914	$61,683,914	$ —	$61,683,914	$ —
Certificates of deposit	7,234,794	7,258,022	—	—	7,258,022
Short-term FHLB advances	100,000	100,000	—	100,000	—
Long-term FHLB advances	8,300,000	8,254,221	—	8,254,221	—
Senior notes	894,723	892,847	—	892,847	—
Subordinated notes	777,084	827,782	—	827,782	—

	December 31, 2016				
		Fair Value			
($ in thousands)	Carrying Amount	Total	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 2,107,722	$ 2,107,722	$2,107,722	$ —	$ —
Securities purchased under agreements to resell	100	100	100	—	—
Investment securities held-to-maturity:					
U.S. Government-sponsored agency securities	993,179	945,768	—	945,768	—
Agency residential MBS	2,689,035	2,626,902	—	2,626,902	—
Other residential MBS	1,875	1,868	—	1,868	—
Agency commercial MBS	2,385,928	2,369,983	—	2,369,983	—
Securities of U.S. states and political subdivisions:					
Tax-exempt municipal securities	6,876,777	6,992,159	—	6,873,058	119,101
Tax-exempt nonprofit debentures	150,322	154,162	—	—	154,162
Taxable municipal securities	53,041	63,019	—	63,019	—
Loans, net:					
Real estate secured mortgages	42,291,421	41,238,014	—	25,816,980	15,421,034
Other loans	9,410,498	8,728,595	—	—	8,728,595
Loans held for sale	407,226	412,495	—	412,495	—
Investments in life insurance	1,273,172	1,273,172	—	—	1,273,172
MSRs	62,410	85,453	—	—	85,453
FHLB stock	160,650	160,650	—	—	160,650
Liabilities:					
Deposits:					
Deposits with no maturity	$53,489,320	$53,489,320	$ —	$53,489,320	$ —
Certificates of deposit	5,113,061	5,143,459	—	—	5,143,459
Securities sold under agreements to repurchase	100,000	100,015	—	100,015	—
Long-term FHLB advances	5,900,000	5,903,075	—	5,903,075	—
Senior notes	397,955	398,436	—	398,436	—
Subordinated notes	387,380	359,569	—	359,569	—
Debt related to VIEs	25,973	22,746	—	22,746	—

Note 14. 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 conditional commitments to originate loans, 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 conditional commitments to originate loans and commitments to disburse additional funds on existing loans and lines of credit are agreements to lend to a client as long as there is no violation of any of several credit or other established conditions. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since commitments may expire without being drawn, the total commitment amounts do not necessarily represent future cash requirements. At December 31, 2017 and 2016, the Bank had conditional commitments to originate loans of $1.6 billion and $1.2 billion, respectively, and to disburse additional funds on existing loans and lines of credit of $17.8 billion and $15.2 billion, respectively.

The Bank's standby letters of credit are conditional lending commitments issued by the Bank to guarantee the performance of a client to a third party under certain arrangements. At December 31, 2017 and 2016, the Bank had undisbursed standby letters of credit of $609.7 million and $442.7 million, respectively.

The Bank has also entered into operating lease agreements for premises and equipment. See Note 8, "Premises, Equipment and Leasehold Improvements," for additional information regarding the Bank's operating lease commitments.

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 15. Preferred Stock

At December 31, 2017, the Bank was authorized to issue 25,000,000 shares of preferred stock, par value $0.01 per share, of which 990,000 shares were issued and outstanding. Each share of preferred stock has a liquidation preference of $1,000. The following table presents the authorized, issued and outstanding shares for each series of the Bank's preferred stock:

(in thousands, except share amounts)	December 31, 2017	December 31, 2016
6.70% Noncumulative Perpetual Series A Preferred Stock—No shares authorized, issued or outstanding at December 31, 2017; 199,525 shares authorized, issued and outstanding at December 31, 2016	$ —	$ 199,525
6.20% Noncumulative Perpetual Series B Preferred Stock—No shares authorized, issued or outstanding at December 31, 2017; 150,000 shares authorized, issued and outstanding at December 31, 2016	—	150,000
5.625% Noncumulative Perpetual Series C Preferred Stock—172,500 shares authorized; 150,000 shares issued and outstanding	150,000	150,000
5.50% Noncumulative Perpetual Series D Preferred Stock—200,000 shares authorized; 190,000 shares issued and outstanding	190,000	190,000
7.00% Noncumulative Perpetual Series E Preferred Stock—200,000 shares authorized, issued and outstanding	200,000	200,000
5.70% Noncumulative Perpetual Series F Preferred Stock—115,000 shares authorized; 100,000 shares issued and outstanding	100,000	100,000
5.50% Noncumulative Perpetual Series G Preferred Stock—172,500 shares authorized; 150,000 shares issued and outstanding	150,000	150,000
5.125% Noncumulative Perpetual Series H Preferred Stock—200,000 shares authorized, issued and outstanding at December 31, 2017 and no shares authorized, issued or outstanding at December 31, 2016	200,000	—
Total	$990,000	$1,139,525

The Bank's preferred stock activity for 2015 through 2017 was as follows:

The 5.70% Noncumulative Perpetual Series F Preferred Stock ("Series F Preferred Stock") was issued on May 27, 2015. Net proceeds, after underwriting discounts and expenses, were approximately $96.6 million. The public offering consisted of 4,000,000 depositary shares, each representing a 1/40th interest in a share of Series F Preferred Stock, at a public offering price of $25.00 per depositary share. The Series F Preferred Stock is redeemable at the option of the Bank, subject to required regulatory approvals, on or after June 30, 2020.

The 5.50% Noncumulative Perpetual Series G Preferred Stock ("Series G Preferred Stock") was issued on February 10, 2016. Net proceeds, after underwriting discounts and expenses, were $145.2 million. The public offering consisted of 6,000,000 depositary shares, each representing a 1/40th interest in a share of the Series G Preferred Stock, at a public offering price of $25.00 per depositary share. The Series G Preferred Stock is redeemable at the option of the Bank, subject to required regulatory approvals, on or after March 30, 2021.

On January 30, 2017 (the "Series A Redemption Date"), the Bank redeemed all of its outstanding shares of the Bank's 6.70% Noncumulative Perpetual Series A Preferred Stock ("Series A Preferred Stock"). All 7,981,000 depositary shares, representing a 1/40th interest in the Series A Preferred Stock, were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $199.5 million plus all accrued and unpaid dividends as of the Series A Redemption Date. As of December 31, 2017, there are no outstanding shares of Series A Preferred Stock. No further dividends will be declared on the Series A Preferred Stock.

The 5.125% Noncumulative Perpetual Series H Preferred Stock (“Series H Preferred Stock”) was issued on June 7, 2017. Net proceeds, after underwriting discounts and expenses, were $193.7 million. The public offering consisted of 8,000,000 depositary shares, each representing a 1/40th interest in a share of the Series H Preferred Stock, at a public offering price of $25.00 per depositary share. The Series H Preferred Stock is redeemable at the option of the Bank, subject to required regulatory approvals, on or after June 30, 2022.

On June 16, 2017 (the “Series B Redemption Date”), the Bank redeemed all of its outstanding shares of the Bank’s 6.20% Noncumulative Perpetual Series B Preferred Stock (“Series B Preferred Stock”). All 6,000,000 depositary shares, representing a 1/40th interest in the Series B Preferred Stock, were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $150.0 million plus all accrued and unpaid dividends as of the Series B Redemption Date. As of December 31, 2017, there are no outstanding shares of Series B Preferred Stock. No further dividends will be declared on the Series B Preferred Stock.

Refer to Note 23, “Subsequent Events,” for information regarding the Bank’s redemption of 5.625% Noncumulative Perpetual Series C Preferred Stock on January 2, 2018.

Dividends on each series of the Bank’s outstanding shares of preferred stock are paid each March 30, June 30, September 30 and December 30. The following table presents dividends paid on preferred stock:

	Year Ended December 31,		
($ in thousands)	2017	2016	2015
6.70% Noncumulative Perpetual Series A Preferred Stock	$ 1,117	$ 13,368	$ 13,368
6.20% Noncumulative Perpetual Series B Preferred Stock	4,305	9,300	9,300
5.625% Noncumulative Perpetual Series C Preferred Stock	8,438	8,438	8,438
5.50% Noncumulative Perpetual Series D Preferred Stock	10,450	10,450	10,450
7.00% Noncumulative Perpetual Series E Preferred Stock	14,000	14,000	14,000
5.70% Noncumulative Perpetual Series F Preferred Stock	5,700	5,700	3,372
5.50% Noncumulative Perpetual Series G Preferred Stock	8,250	7,333	—
5.125% Noncumulative Perpetual Series H Preferred Stock	5,780	—	—
Total	$ 58,040	$ 68,589	$ 58,928

Note 16. Common Stock and Stock Plans

Common Stock

At December 31, 2017, the Bank was authorized to issue 400,000,000 shares of common stock, par value $0.01 per share. At December 31, 2017 and 2016, the Bank had 161,695,803 and 154,292,487 shares issued and outstanding, respectively. During 2017, the Bank sold 5,375,000 shares of common stock in underwritten offerings, which added $508.9 million to common equity.

First Republic Bank Employee Stock Purchase Plan

Under the Bank’s Employee Stock Purchase Plan (the “Purchase Plan”), the Bank is authorized to sell 2,000,000 shares of common stock to its full-time and part-time employees who are regularly employed for 20 hours or more per week. For 2017, 2016 and 2015, employees could purchase shares of the Bank’s common stock at 90%, of the closing price of the common stock on the New York Stock Exchange on the date of purchase or the nearest prior trading day, subject to an annual limitation of common stock valued at $25,000. A total of 613,571 shares have been sold to employees under the Purchase Plan since its inception in 2011. In 2017, a total of 124,766 shares were sold to employees, compared to 129,051 in 2016 and 114,225 in 2015. The Bank

recognizes compensation costs for the Purchase Plan, since it meets the criteria of a compensatory plan under ASC 718-50, "Compensation—Stock Compensation—Employee Share Purchase Plans." For 2017, 2016 and 2015, compensation expense for the Purchase Plan was approximately $1,181,000, $920,000 and $691,000, respectively.

First Republic Bank 2017 Omnibus Award Plan

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

The Bank is authorized to grant shares of common stock in the form of stock options, stock appreciation rights, shares of restricted stock, restricted stock units or performance share units to its employees, officers and directors under the 2017 Omnibus Award Plan. Upon termination of service, unvested awards are generally forfeited. At December 31, 2017, the Bank had 4,110,460 shares reserved for future stock award grants.

Stock Options

At December 31, 2017 and 2016, the Bank had stock options outstanding, less forfeitures, of 2,386,352 and 4,814,379, respectively. Under the Bank's stock option agreements, the exercise price of each option equals the market price of the Bank's common stock at the grant date. Generally, stock options vest over a period of up to four years from the grant date and have a maximum contractual life of ten years. The Bank has granted options that have time vesting requirements ("Time Options"), performance vesting criteria ("Performance Options") and market vesting conditions ("Market Options").

The following tables present information related to Time Options, Performance Options and Market Options:

	Time Options			
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding as of December 31, 2014	4,896,652	$ 15.01		
Granted	—	—		
Canceled or forfeited	—	—		
Exercised	(808,288)	$ 15.00		
Options outstanding as of December 31, 2015	4,088,364	$ 15.01	4.5 years	$ 208,692,936
Granted	—	—		
Canceled or forfeited	—	—		
Exercised	(1,006,714)	$ 15.05		
Options outstanding as of December 31, 2016	3,081,650	$ 15.00	3.5 years	$ 237,706,171
Granted	—	—		
Canceled or forfeited	—	—		
Exercised	(1,727,503)	$ 15.00		
Options outstanding as of December 31, 2017	1,354,147	$ 15.01	2.5 years	$ 96,998,781

	Performance Options				Market Options			
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding as of December 31, 2014	2,681,700	$16.05			178,063	$15.00		
Granted	—	—			—	—		
Canceled or forfeited	(1,998)	$29.34			—	—		
Exercised	(350,558)	$15.83			(178,063)	$15.00		
Options outstanding as of December 31, 2015	2,329,144	$16.08	4.6 years	$116,420,622	—	—	—	—
Granted	—	—			—	—		
Canceled or forfeited	—	—			—	—		
Exercised	(596,415)	$15.98			—	—		
Options outstanding as of December 31, 2016	1,732,729	$16.11	3.6 years	$131,742,144	—	—	—	—
Granted	—	—			—	—		
Canceled or forfeited	—	—			—	—		
Exercised	(700,524)	$16.32			—	—		
Options outstanding as of December 31, 2017	1,032,205	$15.96	2.6 years	$ 72,951,145	—	—	—	—

Time Options vest 25% per annum over four years or on a monthly basis in equal amounts over a term of 48 months. Performance Options vest 25% per annum over four years provided that certain criteria, including return on average tangible common equity, nonperforming asset ratios and growth in non-certificates of deposit accounts, are achieved. The measurement of the performance criteria occurs at the calendar year-end, with vesting generally early in the second calendar quarter of the following year. All options were fully vested as of December 31, 2016. The following table presents options that vested during the periods indicated:

	Number of Options Vested		
Year Ended December 31,	**Time Options**	**Performance Options**	**Market Options**
2015	750	50,362	—
2016	—	29,992	—

At December 31, 2017, the weighted average exercise price of all outstanding options was $15.42 and the weighted average remaining contractual term was 2.5 years.

The intrinsic value of all options exercised was $193.3 million in 2017, compared to $91.4 million in 2016 and $59.1 million in 2015. Stock option exercises are satisfied by issuing shares from the Bank's authorized shares. The number of shares of common stock issued from stock option exercises are generally net of shares withheld to pay the exercise price or taxes due upon the exercise.

Restricted Stock Units

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

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

	Performance RSUs			Time RSUs		
	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term
Nonvested awards as of December 31, 2014	927,635	$ 47.64		236,150	$34.43	
Granted	749,047	$ 60.40		22,212	$59.43	
Vested	(263,196)	$ 46.58		(127,958)	$36.29	
Canceled or forfeited	(24,617)	$ 48.89		(6,250)	$32.66	
Nonvested awards as of December 31, 2015	1,388,869	$ 54.70	3.1 years	124,154	$37.07	0.3 years
Granted	783,518	$ 70.55		653,077	$67.43	
Vested	(432,098)	$ 52.46		(123,904)	$37.36	
Canceled or forfeited	(73,925)	$ 57.51		(19,150)	$64.53	
Nonvested awards as of December 31, 2016	1,666,364	$ 62.61	3.0 years	634,177	$67.45	2.7 years
Granted	828,659	$100.54		34,867	$94.42	
Vested	(560,410)	$ 57.85		(203,563)	$67.62	
Canceled or forfeited	(33,525)	$ 74.63		(22,656)	$69.62	
Nonvested awards as of December 31, 2017	1,901,088	$ 80.33	3.0 years	442,825	$69.38	1.8 years

The total fair value of Performance RSUs that vested in 2017, 2016 and 2015 was approximately $54.6 million, $30.0 million and $16.0 million, respectively. The total fair value of Time RSUs that vested in 2017, 2016 and 2015 was approximately $19.2 million, $8.8 million and $7.7 million, respectively. No cash consideration was received in connection with the vesting of these awards.

Performance Share Units

The Bank has granted performance share units ("PSUs") to certain of its employees and officers. Upon vesting, one share of common stock is issued from the Bank's authorized shares for each PSU. The number of shares of common stock issued at the time of vesting is generally net of shares withheld to pay taxes due upon vesting. Participants are entitled to dividends and voting rights only upon vesting. Certain PSUs vest in full after three years, subject to achieving certain performance criteria, while other PSUs vest evenly over five years from the date of grant, provided that certain performance criteria are met. Performance criteria include metrics such as return on equity, return on average tangible common equity and the Tier 1 leverage ratio, and are based on performance periods that are specified for each grant. The following table presents information related to PSUs:

	Number of Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term
Nonvested awards as of December 31, 2014	297,500	$ 44.22	
Granted	225,000	$ 60.31	
Vested	—	—	
Canceled or forfeited	—	—	
Nonvested awards as of December 31, 2015	522,500	$ 51.15	2.2 years
Granted	322,500	$ 70.54	
Vested	(127,000)	$ 43.09	
Canceled or forfeited	—	—	
Nonvested awards as of December 31, 2016	718,000	$ 61.29	2.7 years
Granted	299,750	$100.53	
Vested	(279,000)	$ 52.99	
Canceled or forfeited	—	—	
Nonvested awards as of December 31, 2017	738,750	$ 80.34	3.1 years

The total fair value of PSUs that vested during 2017 and 2016 was $26.2 million and $8.9 million, respectively. No cash consideration was received in connection with the vesting of these awards.

Restricted Stock Awards

The Bank previously granted restricted stock awards ("RSAs") to certain of its employees and officers. Upon grant, one share of common stock is issued from the Bank's authorized shares for each RSA. Upon vesting, common stock shares are transferred to the employee or officer. At the time of vesting, shares are generally withheld to pay the taxes due upon vesting. Participants are entitled to dividends and voting rights for all RSAs, regardless of whether the award has vested.

RSAs have time-based vesting requirements ("Time RSAs") or both time-based and performance-based vesting requirements ("Performance RSAs"). The majority of Performance RSAs generally vest on a quarterly basis through the end of 2019. Time RSAs and certain Performance RSAs vest 25% per annum over four years. Performance RSAs vest over these periods, provided that certain performance criteria are achieved, such as return on average tangible common equity, return on average tangible assets and nonperforming asset ratios, for performance periods that are specified for each grant. Time RSAs were fully vested as of December 31, 2016. The following table presents information related to Performance RSAs and Time RSAs:

	Performance RSAs			Time RSAs		
	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, 2014	350,000	$32.74		56,500	$31.50	
Granted	—	—		—	—	
Vested	(130,000)	$32.77		(28,250)	$31.50	
Canceled or forfeited	—	—		—	—	
Nonvested awards as of December 31, 2015	220,000	$32.72	3.1 years	28,250	$31.50	0.2 years
Granted	—	—		—	—	
Vested	(127,500)	$32.59		(28,250)	$31.50	
Canceled or forfeited	—	—		—	—	
Nonvested awards as of December 31, 2016	92,500	$32.89	2.0 years	—	—	—
Granted	—	—		—	—	
Vested	(57,500)	$33.56		—	—	
Canceled or forfeited	—	—		—	—	
Nonvested awards as of December 31, 2017	35,000	$31.80	2.0 years	—	—	—

The total fair value of Performance RSAs that vested during 2017, 2016 and 2015 was $5.5 million, $9.4 million and $8.0 million, respectively. The total fair value of Time RSAs that vested during 2016 and 2015 was $1.9 million and $1.6 million, respectively. No cash consideration was received in connection with the vesting of these awards.

Compensation Expense

RSUs, PSUs and RSAs are valued at the closing market price of the Bank's common stock at the grant date, and compensation expense is recognized over the requisite service period, which is generally the vesting period. The Bank accounts for forfeitures of stock awards in the period they occur. All compensation costs related to stock options had been fully recognized as of December 31, 2016.

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

	Year Ended December 31,					
	2017		2016		2015	
($ in thousands)	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit	Expense Recognized	Related Tax Benefit
Stock Options	$ —	$ —	$ 115	$ 47	$ 419	$ 178
RSUs	58,174	24,550	41,278	17,421	22,350	9,499
PSUs	14,997	6,329	10,258	4,329	6,164	2,620
RSAs	893	377	3,929	1,658	5,210	2,214
Total	$74,064	$31,256	$55,580	$23,455	$34,143	$14,511

	At December 31, 2017	
($ in thousands)	Unrecognized Expense	Weighted Average Expected Recognition Period
RSUs	$141,395	3.0 years
PSUs	44,778	3.5 years
RSAs	1,111	2.0 years
Total	$187,284	

Excess Tax Benefits

In accordance with the amendments to ASC 718, which became effective in 2016, excess tax benefits from exercise or vesting of share-based awards are recorded as a reduction in provision for income taxes in the period of exercise or vesting. The following table presents excess tax benefits recognized, by award type:

	Year Ended December 31,			
	2017		2016	
($ in thousands)	Number of Awards Exercised or Vested	Related Excess Tax Benefit	Number of Awards Exercised or Vested	Related Excess Tax Benefit
Stock Options	2,428,027	$75,825	1,603,129	$34,708
RSUs	763,973	12,015	556,002	5,152
PSUs	279,000	4,986	127,000	1,530
RSAs	57,500	1,545	155,750	2,672
Total	3,528,500	$94,371	2,441,881	$44,062

Note 17. Accumulated Other Comprehensive Income (Loss)

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

($ in thousands)	Securities Available-For-Sale	Securities Transferred from Available-For-Sale to Held-to-Maturity	Cash Flow Hedges	Total
Balance at December 31, 2014	**$ 3,115**	**$ —**	**$(19)**	**$ 3,096**
Net unrealized loss on securities available-for-sale	(13,481)	—	—	(13,481)
Related tax effect	5,729	—	—	5,729
Reclassification of gain on securities available-for-sale to net income [1]	(1,014)	—	—	(1,014)
Related tax effect [2]	431	—	—	431
Reclassification of loss on cash flow hedges to net income [3]	—	—	31	31
Related tax effect [2]	—	—	(12)	(12)
Other comprehensive income (loss)	(8,335)	—	19	(8,316)
Balance at December 31, 2015	**(5,220)**	**—**	**—**	**(5,220)**
Net unrealized gain on securities available-for-sale	23,336	—	—	23,336
Related tax effect	(9,848)	—	—	(9,848)
Reclassification of gain on securities available-for-sale to net income [1]	(1,047)	—	—	(1,047)
Related tax effect [2]	442	—	—	442
Unrealized gains on securities transferred from available-for-sale to held-to-maturity	(8,574)	8,574	—	—
Related tax effect	3,644	(3,644)	—	—
Amortization of unrealized gains on securities transferred from available-for-sale to held-to-maturity [4]	—	(2,244)	—	(2,244)
Related tax effect [2]	—	920	—	920
Other comprehensive income	7,953	3,606	—	11,559
Balance at December 31, 2016	**2,733**	**3,606**	**—**	**6,339**
Net unrealized loss on securities available-for-sale	(18,186)	—	—	(18,186)
Related tax effect	7,622	—	—	7,622
Reclassification of loss on securities available-for-sale to net income [1]	2,351	—	—	2,351
Related tax effect [2]	(992)	—	—	(992)
Amortization of unrealized gains on securities transferred from available-for-sale to held-to-maturity [4]	—	(1,776)	—	(1,776)
Related tax effect [2]	—	802	—	802
Other comprehensive loss	(9,205)	(974)	—	(10,179)
Balance at December 31, 2017	**$ (6,472)**	**$ 2,632**	**$ —**	**$ (3,840)**

(1) Included in gain (loss) on investment securities, net on the consolidated statements of income and comprehensive income.
(2) Included in provision for income taxes on the consolidated statements of income and comprehensive income.
(3) Included in interest expense on deposits on the consolidated statements of income and comprehensive income.
(4) Included in interest income on investments on the consolidated statements of income and comprehensive income.

Note 18. Employee Benefit Plans

The Bank's 401(k) Plan is a qualified defined contribution plan under section 401(k) of the Internal Revenue Code ("IRC") of 1986, as amended. Generally, employees are automatically enrolled in the Bank's 401(k) Plan upon their date of hire. The 401(k) Plan assets are invested by plan participants in a family of investment funds. Eligible employees may contribute up to 50% of their pre-tax and post-tax eligible compensation as defined in the 401(k) Plan, subject to certain IRC limitations. Under the 401(k) Plan, the Bank makes matching contributions every pay period up to a maximum of 3% of the participant's eligible compensation. The matching contributions have a three year vesting requirement. Upon termination of service, any unvested employer match is generally forfeited. The Bank's contributions to the 401(k) Plan were approximately $14.7 million, $12.1 million and $7.7 million for 2017, 2016 and 2015, respectively.

The Bank has a Deferred Compensation Plan under which eligible employees may defer receipt of a portion of salary or incentive compensation. Such deferred compensation may be invested in an interest-bearing deposit account. Deferred amounts will be distributed to employees in accordance with their elections. At December 31, 2017 and 2016, the deferred compensation liability was $36.8 million and $28.7 million, respectively.

Since inception, the Bank has not offered any other employee benefit plans and, at December 31, 2017, has no requirement to accrue additional expenses for any pension or other post-employment benefits.

Note 19. Income Taxes

On December 22, 2017, the Tax Reform Act was enacted into law. Among other changes, the Tax Reform Act reduces the federal tax rate for corporations from 35% to 21%, effective January 1, 2018. As a result, the Bank recorded a one-time revaluation adjustment to decrease its deferred tax assets, with a corresponding increase to the provision for income taxes of $39.7 million for the year ended December 31, 2017. The Bank will continue to assess future guidance related to the Tax Reform Act and may also identify additional adjustments to its recorded deferred tax assets upon filing of its 2017 U.S. income tax return, but does not currently anticipate significant revisions to its deferred tax assets or provision for income taxes.

In accordance with the amendments to ASC 718, which became effective in 2016, excess tax benefits from exercise or vesting of share-based awards are recorded as a reduction in provision for income taxes in the period of exercise or vesting. Previously, excess tax benefits and certain tax deficiencies were recorded in additional paid-in capital. Beginning in 2016, the effective tax rate reflects the adoption of this guidance.

In accordance with ASC 323-740, tax credit investment amortization expense is presented as a component of provision for income taxes. The following table presents the components of the Bank's provision for income taxes:

($ in thousands)	Year Ended December 31, 2017	2016	2015
Federal:			
Current	$ (139,238)	$ 9,024	$ 48,402
Deferred	112,410	(21,561)	(21,687)
Subtotal	(26,828)	(12,537)	26,715
State:			
Current	44,824	69,778	69,762
Deferred	15,552	(6,436)	(6,945)
Subtotal	60,376	63,342	62,817
Tax credit investment amortization	120,994	103,363	78,991
Total provision for income taxes	$ 154,542	$ 154,168	$ 168,523

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

	Year Ended December 31, 2017	2016	2015
Expected statutory rate	35.0%	35.0%	35.0%
State taxes, net of federal benefits	6.1%	5.9%	5.9%
Tax-exempt income	(13.4)%	(12.0)%	(11.2)%
Bank-owned life insurance	(1.5)%	(2.0)%	(1.8)%
Tax credits	(16.9)%	(15.5)%	(14.9)%
Tax credit investment amortization	13.3%	12.4%	11.5%
Excess tax benefits—stock options	(8.3)%	(4.2)%	—%
Excess tax benefits—other stock awards	(2.1)%	(1.1)%	—%
Deferred tax assets valuation adjustment	4.4%	—%	—%
Other, net	0.3%	0.1%	(0.1)%
Effective tax rate	16.9%	18.6%	24.4%

The following table presents the tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities:

($ in thousands)	December 31, 2017	December 31, 2016
Deferred tax assets:		
Excess tax credit carryforwards	$ 135,477	$ 17,306
Allowance for loan losses	109,048	129,292
Accrued compensation	24,613	100,112
Stock award expense	21,040	31,044
Depreciation	12,539	25,484
Deferred rent	8,897	10,247
Loan discounts	8,468	15,383
State income taxes	6,060	16,178
Reserve for unfunded loan commitments	4,232	5,275
Net operating losses	3,267	—
Unrealized losses on securities available-for-sale	1,980	—
Intangible assets	1,243	3,402
Other deferred tax assets	2,410	3,949
Gross deferred tax assets	339,274	357,672
Deferred tax liabilities:		
Deferred loan costs	(83,981)	(96,391)
Mortgage servicing rights	(16,294)	(20,841)
Unrealized gains on securities available-for-sale	—	(4,628)
Other deferred tax liabilities	(1,299)	(1,757)
Gross deferred tax liabilities	(101,574)	(123,617)
Net deferred tax assets	$ 237,700	$ 234,055

Gross deferred tax assets represent recoverable taxes. At December 31, 2017, the Bank has excess tax credit carryforwards and net operating losses of $135.5 million and $3.3 million, respectively, which expire in varying amounts between 2035 and 2037. At December 31, 2017 and 2016, management believes a valuation allowance is not needed because it is more likely than not that deferred tax assets will be realized based on our history of earnings and our ability to implement tax planning strategies.

The table below presents a reconciliation of the beginning and ending amount of unrecognized tax benefits:

($ in thousands)	At or for the Year Ended December 31, 2017	At or for the Year Ended December 31, 2016
Balance at beginning of period	$ 170	$ 341
Additions for tax positions related to the current year	—	—
Additions for tax positions related to prior years	9	16
Subtractions for tax positions related to prior years	(81)	(187)
Balance at end of period	$ 98	$ 170

At December 31, 2017 and 2016, the amount of net current taxes receivable was $79.3 million and $7.1 million, respectively.

At December 31, 2017 and 2016, the Bank has accrued current taxes payable of approximately $98,000 and $170,000, respectively, related to uncertain tax positions. If recognized, the entire amount of unrecognized tax benefits at December 31, 2017 would affect the Bank's consolidated effective tax rate. The Bank also recognized interest and penalties of approximately $9,000 and $8,000 (recorded in income tax expense) related to uncertain tax positions for the years ended December 31, 2017 and 2016, respectively.

The Bank continues to monitor the progress of ongoing income tax controversies and the impact, if any, of the expected tolling of the statute of limitations in various taxing jurisdictions. The Bank's tax returns for the years ended December 31, 2017 through 2013 remain subject to examination by the Internal Revenue Service, the California Franchise Tax Board or various other state taxing authorities. The Bank does not currently believe there is a reasonable possibility of any significant change to our total unrecognized tax benefits within the next twelve months.

Note 20. Earnings Per Common Share ("EPS")

In accordance with the amendments to ASC 718, which became effective in 2016, excess tax benefits from exercise or vesting of share-based awards are recorded as a reduction in provision for income taxes in the period of exercise or vesting. In addition, beginning in 2016, excess tax benefits are no longer included in assumed proceeds when determining average diluted shares outstanding under the treasury stock method, resulting in changes to average diluted shares outstanding.

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

(in thousands, except per share amounts)	Year Ended December 31, 2017	2016	2015
Basic EPS:			
Net income	$ 757,660	$ 673,428	$ 522,145
Less: Dividends on preferred stock	58,040	68,589	58,928
Net income available to common shareholders	$ 699,620	$ 604,839	$ 463,217
Weighted average common shares outstanding	157,624	148,752	141,689
Net income per common share—basic	$ 4.44	$ 4.07	$ 3.27
Diluted EPS:			
Net income available to common shareholders	$ 699,620	$ 604,839	$ 463,217
Weighted average shares:			
Common shares outstanding	157,624	148,752	141,689
Dilutive effect of stock options	3,465	4,388	3,255
Dilutive effect of restricted stock awards, restricted stock units and performance share units	1,251	955	566
Weighted average diluted common shares outstanding	162,340	154,095	145,510
Net income per common share—diluted	$ 4.31	$ 3.93	$ 3.18

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

(in thousands)	Year Ended December 31, 2017	2016	2015
Restricted stock units	6	2	4

Note 21. Regulatory Capital

The Bank is subject to various regulatory capital requirements administered by the FDIC. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Bank's consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Bank must meet specific capital guidelines that involve quantitative measures of the Bank's assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The Bank's capital amounts and classification will also be subject to qualitative judgments by the regulators about components, risk weightings and other factors.

The Bank's capital ratios exceeded all applicable regulatory requirements at December 31, 2017 and 2016 for well-capitalized institutions. The following table presents the Bank's regulatory capital information at December 31, 2017 and 2016 and the standards for both well-capitalized depository institutions and applicable minimum capital requirements:

	Actual (Transitional)	Fully Phased-in [1]	Actual (Transitional)	Regulatory Requirements		
($ in thousands)	December 31, 2017		December 31, 2016	Well-Capitalized Ratio	Minimum Capital Ratio	Minimum Capital Conservation Buffer [2]
Capital Ratios						
Tier 1 leverage ratio (Tier 1 capital to average assets)	8.85%	8.83%	9.37%	5.00%	4.00%	—%
Common Equity Tier 1 capital to risk-weighted assets	10.63%	10.57%	10.83%	6.50%	4.50%	1.25%
Tier 1 capital to risk-weighted assets	12.22%	12.19%	13.07%	8.00%	6.00%	1.25%
Total capital to risk-weighted assets	14.11%	14.09%	14.46%	10.00%	8.00%	1.25%
Regulatory Capital [3]						
Common Equity Tier 1 capital	$ 6,488,618	$ 6,449,589	$ 5,496,582			
Tier 1 capital	$ 7,457,944	$ 7,439,589	$ 6,631,383			
Total capital	$ 8,615,389	$ 8,597,034	$ 7,337,725			
Assets [3]						
Average assets	$84,238,404	$84,220,049	$70,779,188			
Risk-weighted assets	$61,054,077	$61,035,722	$50,744,017			

(1) Certain adjustments required under the Basel III Capital Rules will be phased in through the end of 2018. The ratios and amounts shown in this column are calculated assuming a fully phased-in basis of all such adjustments as if they were effective as of December 31, 2017.

(2) Beginning on January 1, 2016, a capital conservation buffer is required to be held by banking institutions. The minimum required capital conservation buffer is 1.25% in 2017 and is being phased in through January 1, 2019 when it reaches 2.5%. As of December 31, 2017, our capital conservation buffer was 6.11%, which exceeded both the transitional buffer of 1.25% and the fully phased-in minimum requirements of 2.5%.

(3) As defined by regulatory capital rules.

The Bank's ability to declare a cash dividend or other distribution with respect to capital is subject to federal and state statutory and regulatory restrictions and possible approval requirements based upon earnings, financial condition, cash needs and general business conditions. Federal and state banking agencies also have authority to prohibit the Bank from engaging in business practices that are considered unsafe or unsound, possibly including the payment of dividends or other distributions with respect to capital. In addition, the Bank cannot declare or pay dividends on common stock or redeem or repurchase common stock for any period for which dividends on preferred stock have not been declared and paid in full.

Note 22. 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 Commercial Banking segment represents most of the operations of the Bank, including real estate secured lending, retail deposit gathering, private banking activities, mortgage sales and servicing, and managing capital, liquidity and interest rate risk.

The Wealth Management segment consists of (i) the investment management activities of FRIM, which manages assets for individuals and institutions in equity securities, fixed income securities, balanced portfolios and alternative investments; (ii) First Republic Trust Company, a division of the Bank that offers personal trust and custody services; (iii) FRTC Delaware, a wholly-owned subsidiary of the Bank that provides personal trust and custody services; (iv) the Bank's mutual fund activities through third-party providers; (v) the brokerage activities of FRSC; and (vi) the Bank's foreign exchange activities conducted on behalf of clients. In addition, the Wealth Management segment earns fee income for offering sales of insurance and annuity products to clients and managing the Bank's investment portfolio and is allocated a portion of interest income that is earned on deposits gathered by wealth management professionals, including sweep deposit accounts.

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

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

($ in thousands)	Commercial Banking	Wealth Management	Reconciling Items	Consolidated Total
At or for the Year Ended December 31, 2017				
Net interest income	$ 2,084,137	$ 67,326	$ —	$ 2,151,463
Provision for loan losses	60,181	—	—	60,181
Noninterest income	100,133	393,962	(33,634)	460,461
Amortization of intangibles	5,281	15,344	—	20,625
Other noninterest expense	1,317,555	334,995	(33,634)	1,618,916
Income before provision for income taxes	801,253	110,949	—	912,202
Provision for income taxes	110,593	43,949	—	154,542
Net income	$ 690,660	$ 67,000	$ —	$ 757,660
Goodwill	$ 51,435	$ 147,012	$ —	$ 198,447
Total Assets	$ 87,401,617	$ 585,468	$(206,578)	$ 87,780,507
At or for the Year Ended December 31, 2016				
Net interest income	$ 1,757,319	$ 59,843	$ —	$ 1,817,162
Provision for loan losses	47,192	—	—	47,192
Noninterest income	102,906	316,621	(24,715)	394,812
Amortization of intangibles	7,019	17,983	—	25,002
Other noninterest expense	1,070,432	266,467	(24,715)	1,312,184
Income before provision for income taxes	735,582	92,014	—	827,596
Provision for income taxes	117,468	36,700	—	154,168
Net income	$ 618,114	$ 55,314	$ —	$ 673,428
Goodwill	$ 56,165	$ 147,012	$ —	$ 203,177
Total Assets	$ 72,867,678	$ 537,300	$(127,206)	$ 73,277,772
At or for the Year Ended December 31, 2015				
Net interest income	$ 1,477,650	$ 39,013	$ —	$ 1,516,663
Provision for loan losses	55,439	—	—	55,439
Noninterest income	92,004	248,879	(15,830)	325,053
Amortization of intangibles	8,755	13,005	—	21,760
Other noninterest expense	879,511	210,168	(15,830)	1,073,849
Income before provision for income taxes	625,949	64,719	—	690,668
Provision for income taxes	141,189	27,334	—	168,523
Net income	$ 484,760	$ 37,385	$ —	$ 522,145
Goodwill	$ 24,604	$ 147,012	$ —	$ 171,616
Total Assets	$ 58,585,272	$ 558,878	$(162,865)	$ 58,981,285

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

Note 23. Subsequent Events

The Bank evaluated the effects of events that have occurred subsequent to the year ended December 31, 2017.

On January 2, 2018 (the "Series C Redemption Date"), the Bank redeemed all of the outstanding shares of its 5.625% Noncumulative Perpetual Series C Preferred Stock ("Series C Preferred Stock"). All 6,000,000 depositary shares, representing a 1/40th interest in the Series C Preferred Stock, were redeemed at a redemption price of $25.00 per share, representing an aggregate amount of $150.0 million plus all accrued and unpaid dividends as of the Series C Redemption Date. As of January 2, 2018, the Series C Preferred Stock is deemed no longer outstanding, and no further dividends will be declared on the Series C Preferred Stock. This redemption reduced the Bank's Tier 1 capital by $150.0 million.

In January 2018, the Bank early adopted ASU 2017-12, "Derivatives and Hedging: Targeted Improvements to Accounting and Hedging Activities." In connection with the adoption of this guidance, the Bank made a one-time transfer of eligible held-to-maturity securities with a carrying amount of $2.1 billion to available-for-sale and recorded $12.3 million of unrealized gain, net of taxes, in accumulated other comprehensive income.

During January 2018, the Bank performed a repositioning of its investment portfolio and sold certain available-for-sale U.S. Treasury securities, U.S. Government-sponsored agency securities, agency residential MBS, agency commercial MBS, and tax-exempt municipal securities with proceeds of $2.2 billion, and recognized a gain on sale of $10.7 million.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors
First Republic Bank:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of First Republic Bank and subsidiaries (the Bank) as of December 31, 2017 and 2016, the related consolidated statements of income and comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the consolidated financial statements). We also have audited the Bank's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Bank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Bank's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Bank's consolidated financial statements and an opinion on the Bank's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

(continued on following page)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

(continued from previous page)

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

We have served as the Bank's auditor since 2010.

San Francisco, California
February 28, 2018

FIRST REPUBLIC BANK
MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the First Republic Bank and subsidiaries (the Bank) is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Bank's internal control over financial reporting is designed by, or under the supervision of the Bank's principal executive and principal financial officers and effected by the Bank's board of directors, management and other personnel, 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. The Bank's internal control over financial reporting includes those policies and procedures that:

(i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Bank;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Bank are being made only in accordance with authorizations of management and directors of the Bank; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Bank's management assessed the effectiveness of the Bank's internal control over financial reporting as of December 31, 2017, using the criteria for effective internal control over financial reporting set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control—Integrated Framework (2013)*. Based on this assessment, management concluded that, as of December 31, 2017, the Bank's internal control over financial reporting was effective.

KPMG LLP, the independent registered public accounting firm that audited the Bank's consolidated financial statements as of December 31, 2017 included in this Annual Report on Form 10-K, issued an audit report on the Bank's internal control over financial reporting. KPMG's audit report appears on page 172.

FIRST REPUBLIC BANK
QUARTERLY FINANCIAL DATA
(UNAUDITED)

($ in thousands, except per share amounts)	2017 Quarter Ended Dec. 31	2017 Sept. 30	2017 June 30	2017 Mar. 31	2016 Quarter Ended Dec. 31	2016 Sept. 30	2016 June 30	2016 Mar. 31
Interest income	$662,801	$637,167	$599,155	$552,495	$537,594	$504,314	$479,412	$459,553
Interest expense	93,940	86,214	67,191	52,810	46,969	43,710	37,794	35,238
Net interest income	568,861	550,953	531,964	499,685	490,625	460,604	441,618	424,315
Provision for loan losses	17,042	10,113	23,938	9,088	10,500	18,000	14,200	4,492
Noninterest income	130,297	119,333	109,372	101,459	108,834	97,271	93,457	95,250
Noninterest expense	445,543	418,359	397,100	378,539	360,174	337,736	320,082	319,194
Income before provision for income taxes	236,573	241,814	220,298	213,517	228,785	202,139	200,793	195,879
Net income	194,277	200,009	186,600	176,774	179,118	171,818	164,997	157,495
Net income available to common shareholders	180,005	185,737	172,256	161,622	161,742	154,441	147,621	141,035
Diluted EPS	$ 1.10	$ 1.14	$ 1.06	$ 1.01	$ 1.03	$ 1.00	$ 0.97	$ 0.93

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. 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 Securities Exchange Act as of the end of the period covered by this report. Our management, including our chief executive officer and chief financial officer, supervised and participated in the evaluation. Based on that evaluation, the chief executive officer and the chief financial officer concluded that our disclosure controls and procedures, as of December 31, 2017, were effective for providing reasonable assurance that information required to be disclosed by us in such reports was accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

See "Item 8. Financial Statements and Supplementary Data."

Changes in Internal Control Over Financial Reporting

There was no significant change in our internal control over financial reporting during the quarter ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

This information is incorporated by reference to the Bank's 2018 Proxy Statement that will be filed with the FDIC pursuant to Regulation 14A not later than 120 days after the end of the Bank's fiscal year.

Item 11. Executive Compensation.

This information is incorporated by reference to the Bank's 2018 Proxy Statement that will be filed with the FDIC pursuant to Regulation 14A not later than 120 days after the end of the Bank's fiscal year.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 201(d) of Regulation S-K regarding securities authorized for issuance under equity compensation plans and other information regarding security ownership is incorporated by reference to the Bank's 2018 Proxy Statement that will be filed with the FDIC pursuant to Regulation 14A not later than 120 days after the end of the Bank's fiscal year.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

This information is incorporated by reference to the Bank's 2018 Proxy Statement that will be filed with the FDIC pursuant to Regulation 14A not later than 120 days after the end of the Bank's fiscal year.

Item 14. Principal Accounting Fees and Services.

This information is incorporated by reference to the Bank's 2018 Proxy Statement that will be filed with the FDIC pursuant to Regulation 14A not later than 120 days after the end of the Bank's fiscal year.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(1) Financial Statements:

See "Item 8. Financial Statements and Supplementary Data."

(2) Financial Statement Schedules:

Financial Statement schedules are omitted either because they are not required or are not applicable, or because the required information is shown in the Financial Statements or notes thereto.

(3) Exhibits:

The exhibits to this Annual Report on Form 10-K listed below have been included with, or incorporated into, the copy of this report filed with the Federal Deposit Insurance Corporation and on our website. Copies of individual exhibits will be furnished to shareholders upon written request to First Republic Bank.

Exhibit No.	Description
3.1	Restated Articles of Incorporation of First Republic Bank.
3.2	Amended and Restated Bylaws of First Republic Bank, incorporated by reference to Exhibit 3.1 of Form 8-K filed on May 16, 2016.
4.1	Specimen stock certificate of First Republic Bank's common stock, incorporated by reference to Exhibit 4.1 of Amendment No. 2 to the Bank's Registration Statement on Form 10 filed on December 7, 2010.
4.2	Deposit Agreement, dated January 24, 2012, by and among the Bank, Computershare Shareowner Services LLC and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on January 24, 2012.
4.3	Form of Depositary Receipt (included in Exhibit 4.2).
4.4	Deposit Agreement, dated June 1, 2012, by and among the Bank, Computershare Shareowner Services LLC and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on June 1, 2012.
4.5	Form of Depositary Receipt (included in Exhibit 4.4).
4.6	Deposit Agreement, dated November 23, 2012, by and among the Bank, Computershare Shareowner Services LLC and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on November 23, 2012.
4.7	Form of Depositary Receipt (included in Exhibit 4.6).

Exhibit No.	Description
4.8	Deposit Agreement, dated April 23, 2013, by and among the Bank, Computershare Shareowner Services LLC and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on April 23, 2013.
4.9	Form of Depositary Receipt (included in Exhibit 4.8).
4.10	Deposit Agreement, dated October 28, 2013, by and among the Bank, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on October 28, 2013.
4.11	Form of Depositary Receipt (included in Exhibit 4.10).
4.12	Fiscal and Agency Paying Agreement, dated June 17, 2014, by and among the Bank and The Bank of New York Mellon Trust Company, N.A., incorporated by reference to Exhibit 4.1 of Form 8-K filed on June 17, 2014.
4.13	Form of Note (included in Exhibit 4.12).
4.14	Deposit Agreement, dated May 27, 2015, by and among the Bank, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on May 27, 2015.
4.15	Form of Depositary Receipt (included in Exhibit 4.14).
4.16	Deposit Agreement, dated February 10, 2016, by and among the Bank, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on February 10, 2016.
4.17	Form of Depositary Receipt (included in Exhibit 4.16).
4.18	Fiscal and Agency Paying Agreement, dated August 1, 2016, between the Bank and The Bank of New York Mellon Trust Company, N.A., incorporated by reference to Exhibit 4.1 of Form 8-K filed on August 1, 2016.
4.19	Form of Note (included in Exhibit 4.18).
4.20	Fiscal and Agency Paying Agreement, dated February 13, 2017, between the Bank and The Bank of New York Mellon Trust Company, N.A., incorporated by reference to Exhibit 4.1 of Form 8-K filed on February 13, 2017.
4.21	Form of Note (included in Exhibit 4.20).
4.22	Fiscal and Paying Agency Agreement, dated June 6, 2017, between the Bank and The Bank of New York Mellon Trust Company, N.A., incorporated by reference to Exhibit 4.1 of Form 8-K filed on June 6, 2017.
4.23	Form of Note (included in Exhibit 4.22).
4.24	Deposit Agreement, dated June 7, 2017, by and among the Bank, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the Depositary Receipts described therein, incorporated by reference to Exhibit 4.1 of Form 8-K filed on June 7, 2017.
4.25	Form of Depositary Receipt (included in Exhibit 4.24).
4.26	Other instruments defining the rights of debt holders. The registrant hereby agrees to furnish to the FDIC, upon request, copies of instruments defining the rights of holders of long-term debt of the registrant and its consolidated subsidiaries; currently no issuance of debt of the registrant exceeds 10% of the assets of the registrant and its subsidiaries on a consolidated basis.

Exhibit No.	Description
10.1	Employment Agreement, dated June 15, 2010, between First Republic Bank and James H. Herbert, II, incorporated by reference to Exhibit 10.1 of Form 10-Q filed on May 8, 2012.
10.2	Employment Agreement, dated June 15, 2010, between First Republic Bank and Katherine August-deWilde, incorporated by reference to Exhibit 10.2 of Form 10-Q filed on May 8, 2012.
10.3	(i) Amendment No. 1, dated February 23, 2012, to the Employment Agreement, dated June 15, 2010, between James H. Herbert, II and the Bank, and (ii) the Restricted Stock Agreement, dated as of February 27, 2012, between James H. Herbert, II and the Bank, attached as Attachment A thereto, incorporated by reference to Exhibit 10.3 of Form 10-Q filed on May 8, 2012.
10.4	(i) Amendment No. 1, dated February 23, 2012, to the Employment Agreement, dated June 15, 2010, between Katherine August-deWilde and the Bank, and the Nonqualified Stock Option Agreement, dated July 1, 2010, between Katherine August-deWilde and the Bank, (ii) the Consulting Agreement, effective January 1, 2015, between Katherine August-deWilde and the Bank, attached as Exhibit A thereto (the "Consulting Agreement"), and (iii) the Restricted Stock Agreement, dated as of February 27, 2012, by and between Katherine August-deWilde and the Bank, attached as Attachment A to the Consulting Agreement, incorporated by reference to Exhibit 10.4 of Form 10-Q filed on May 8, 2012.
10.5	Employment Agreement Amendment No. 2, dated September 20, 2013, to the Employment Agreement, dated June 15, 2010, as amended effective February 27, 2012, between Katherine August-deWilde and First Republic Bank, incorporated by reference to Exhibit 10.1 of Form 8-K filed on September 23, 2013.
10.6	Employment Agreement Amendment No. 2, effective February 25, 2014, to the Employment Agreement, dated June 15, 2010, as amended effective February 27, 2012, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.6 of Form 10-K filed on February 28, 2014.
10.7	Employment Agreement Amendment No. 3, Consulting Agreement Amendment No. 1, and Restricted Stock Agreement Amendment No. 1, effective February 25, 2014, to the Employment Agreement, dated June 15, 2010, as amended effective February 27, 2012 and December 31, 2013, between Katherine August-deWilde and the Bank, the Consulting Agreement, effective January 1, 2015, between Katherine August-deWilde and the Bank, the Restricted Stock Agreement, dated as of February 27, 2012, between Katherine August-deWilde and the Bank, and Letter Agreement, dated February 26, 2014, between Katherine August-deWilde and the Bank, incorporated by reference to Exhibit 10.7 of Form 10-K filed on February 28, 2014.
10.8	Employment Agreement Amendment No. 3, effective December 1, 2015, to the Employment Agreement, dated June 15, 2010, as amended effective February 27, 2012 and February 25, 2014, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.1 of Form 8-K filed on December 2, 2015.
10.9	Employment Agreement Amendment No. 4, effective May 10, 2017, to the Employment Agreement dated June 15, 2010, as amended effective February 27, 2012, February 25, 2014 and December 1, 2015, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.1 of Form 8-K filed on May 12, 2017.
10.10	Amendment No. 2, effective September 13, 2017, to the Consulting Agreement, effective January 1, 2016, as amended, between Katherine August-deWilde and the Bank, incorporated by reference to Exhibit 10.1 of Form 8-K filed on September 15, 2017.
10.11	Advances and Security Agreement, dated as of July 1, 2010, between the Federal Home Loan Bank of San Francisco and First Republic Bank, incorporated by reference to Exhibit 10.6 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.

Exhibit No.	Description
10.12	Form of Director and Officer Indemnification Agreement, incorporated by reference to Exhibit 10.7 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.13	2010 Omnibus Award Plan, as amended and restated effective May 12, 2015, incorporated by reference to the Bank's Definitive Proxy Statement for the 2015 Annual Meeting of Shareholders on Schedule 14A filed on March 31, 2015.
10.14	Form of Nonqualified Stock Option Agreement under the 2010 Omnibus Award Plan—Time Vesting for California Resident, incorporated by reference to Exhibit 10.9 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.15	Form of Nonqualified Stock Option Agreement under the 2010 Omnibus Award Plan—Performance Vesting for California Resident, incorporated by reference to Exhibit 10.10 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.16	Form of Nonqualified Stock Option Agreement under the 2010 Omnibus Award Plan—Time Vesting for Non-California Resident, incorporated by reference to Exhibit 10.11 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.17	Form of Nonqualified Stock Option Agreement under the 2010 Omnibus Award Plan—Performance Vesting for Non-California Resident, incorporated by reference to Exhibit 10.12 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.18	Form of Supplemental Executive Retirement Plan, incorporated by reference to Exhibit 10.13 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.19	Form of Endorsement Method Split-Dollar Agreement, incorporated by reference to Exhibit 10.14 of the Bank's Registration Statement on Form 10 filed on November 10, 2010.
10.20	Form of Restricted Stock Unit Agreement—Time Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.15 of Form 10-K filed on February 23, 2012.
10.21	Form of Restricted Stock Agreement—Time Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.16 of Form 10-K filed on February 23, 2012.
10.22	2012 Executive Incentive Plan, incorporated by reference to the Bank's Definitive Proxy Statement for the 2012 Annual Meeting of Shareholders on Schedule 14A filed on April 13, 2012.
10.23	Form of Restricted Stock Agreement—Performance Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.20 of Form 10-K filed on February 28, 2014.
10.24	Form of Restricted Stock Unit Agreement—Performance Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.21 of Form 10-K filed on February 28, 2014.
10.25	Form of Restricted Stock Unit Agreement—Time Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.3 of Form 10-Q filed on August 5, 2016.
10.26	Performance Share Unit Agreement, dated as of June 1, 2015, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.1 of Form 10-Q filed on August 6, 2015.
10.27	Performance Share Unit Agreement, dated as of June 1, 2015, between Katherine August-deWilde and the Bank, incorporated by reference to Exhibit 10.2 of Form 10-Q filed on August 6, 2015.
10.28	Form of Performance Share Unit Agreement—Performance Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.3 of Form 10-Q filed on August 6, 2015.
10.29	First Republic Deferred Compensation Plan, incorporated by reference to Exhibit 10.24 of Form 10-K filed on February 28, 2014.
10.30	Form of Performance Share Unit Agreement—Performance Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.1 of Form 10-Q filed on November 6, 2014.

Exhibit No.	Description
10.31	Performance Share Unit Agreement, dated as of June 8, 2016, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.1 of Form 10-Q filed on August 5, 2016.
10.32	Form of Performance Share Unit Agreement—Performance Vesting under the 2010 Omnibus Award Plan, incorporated by reference to Exhibit 10.2 of Form 10-Q filed on August 5, 2016.
10.33	First Republic Bank 2017 Executive Incentive Plan, incorporated by reference to Annex A of the Bank's Definitive Proxy Statement for the 2017 Annual Meeting of Shareholders on Schedule 14A filed on March 27, 2017.
10.34	First Republic Bank 2017 Omnibus Award Plan, incorporated by reference to Annex B of the Bank's Definitive Proxy Statement for the 2017 Annual Meeting of Shareholders on Schedule 14A filed on March 27, 2017.
10.35	Performance Share Unit Agreement, dated as of June 16, 2017, between James H. Herbert, II and the Bank, incorporated by reference to Exhibit 10.1 of Form 10-Q filed on August 8, 2017.
10.36	Form of Performance Share Unit Agreement—Performance Vesting under the 2017 Omnibus Award Plan, incorporated by reference to Exhibit 10.2 of Form 10-Q filed on August 8, 2017.
10.37	Form of Restricted Stock Unit Agreement—Time Vesting under the 2017 Omnibus Award Plan, incorporated by reference to Exhibit 10.3 of Form 10-Q filed on August 8, 2017.
12	Statement of Computation of Ratios of: Earnings to Fixed Charges and Earnings to Fixed Charges and Preferred Stock Dividends.
21	Subsidiaries of First Republic Bank.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Bank has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

FIRST REPUBLIC BANK

By: /s/ MICHAEL J. ROFFLER **Michael J. Roffler**	Executive Vice President and Chief Financial Officer	February 28, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Bank and in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ JAMES H. HERBERT, II **(James H. Herbert, II)**	Chairman, Chief Executive Officer and Director	February 28, 2018
/s/ KATHERINE AUGUST-DEWILDE **(Katherine August-deWilde)**	Vice Chair and Director	February 28, 2018
/s/ MICHAEL J. ROFFLER **(Michael J. Roffler)**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 28, 2018
/s/ OLGA TSOKOVA **(Olga Tsokova)**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2018
/s/ THOMAS J. BARRACK, JR. **(Thomas J. Barrack, Jr.)**	Director	February 28, 2018
/s/ FRANK J. FAHRENKOPF, JR. **(Frank J. Fahrenkopf, Jr.)**	Director	February 28, 2018
/s/ L. MARTIN GIBBS **(L. Martin Gibbs)**	Director	February 28, 2018
/s/ BORIS GROYSBERG **(Boris Groysberg)**	Director	February 28, 2018
/s/ SANDRA R. HERNÁNDEZ **(Sandra R. Hernández)**	Director	February 28, 2018
/s/ PAMELA J. JOYNER **(Pamela J. Joyner)**	Director	February 28, 2018
/s/ REYNOLD LEVY **(Reynold Levy)**	Director	February 28, 2018
/s/ DUNCAN L. NIEDERAUER **(Duncan L. Niederauer)**	Director	February 28, 2018
/s/ GEORGE G.C. PARKER **(George G.C. Parker)**	Director	February 28, 2018
/s/ CHERYL SPIELMAN **(Cheryl Spielman)**	Director	February 28, 2018

Exhibit 3.1

RESTATED ARTICLES OF INCORPORATION

OF

FIRST REPUBLIC BANK

James H. Herbert, II and Michael J. Roffler certify that:

1. They are the Chairman of the Board of Directors and Chief Financial Officer, respectively, of First Republic Bank (the "Corporation"), a California corporation.

2. No shares of the Corporation's 5.625% Noncumulative Perpetual Series C Preferred Stock (the "Series C Preferred Stock") are issued or outstanding.

3. The Restated Articles of Incorporation of the Corporation, as amended, are hereby amended to eliminate the designation of, and the rights, preferences, privileges, and restrictions of, the Series C Preferred Stock and are restated to read in full as set forth in Exhibit A hereto, which is incorporated by reference as if fully set forth herein.

4. The foregoing amendment and restatement has been duly approved by the Board of Directors of the Corporation.

5. The foregoing amendment and restatement was one which may be adopted by the Board of Directors of the Corporation alone under Section 510(f) and Section 910(b) of the California Corporations Code because the amendment relates solely to the reacquiring by the Corporation of all the authorized shares of a series of shares pursuant to Section 510(c) of the California Corporations Code and the related elimination from the articles of the designation and the rights, preferences, privileges, and restrictions of such shares and the restatement, other than such amendment, does not otherwise alter or amend the Restated Articles of Incorporation of the Corporation, as amended.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Signed on this 29th of January, 2018.

/s/ James H. Herbert, II	/s/ Michael J. Roffler
James H. Herbert, II	Michael J. Roffler
Chairman of the Board	Chief Financial Officer

Exhibit A

RESTATED ARTICLES OF INCORPORATION

OF

FIRST REPUBLIC BANK

FIRST, the name of this corporation is First Republic Bank.

SECOND, the purpose of this corporation is to engage in commercial banking business and trust business and any other lawful activities which are not, by applicable laws or regulations, prohibited to a commercial bank authorized to engage in trust business.

THIRD, the Series A Voting Common Stock, par value $0.01 per share ("Voting Common Stock"), of this corporation shall be re-designated as common stock, par value $0.01 per share, of this corporation and all issued and outstanding shares of Voting Common Stock immediately prior to the adoption and effectiveness of these Amended and Restated Articles of Incorporation shall be so re-designated without any action required on the part of any holder of Voting Common Stock. Any certificate evidencing shares of Voting Common Stock shall evidence the same number of shares of common stock following the adoption and effectiveness of these Amended and Restated Articles of Incorporation. The Series B Non-Voting Common Stock, par value $0.01 per share, of this corporation shall be cancelled. The total number of shares of stock of all classes which this corporation has authority to issue is 425,000,000 shares of which 400,000,000 shares shall be common stock, par value $0.01 per share, and 25,000,000 shares shall be preferred stock, par value $0.01 per share.

Preferred Stock. The preferred stock may be issued from time to time by this corporation as shares of one or more series. The board of directors is authorized to fix the number of shares of any series of preferred stock and to determine the designation of any such series. The board of directors is also authorized to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed upon any wholly unissued series of preferred stock and, within the limits and restrictions stated in any resolution or resolutions of the board of directors originally fixing the number of shares constituting any series, to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any such series subsequent to the issue of shares of that series.

FOURTH, no action required to be taken or which may be taken at any annual or special meeting of the shareholders of this corporation may be taken without a meeting, and the power of shareholders to consent in writing, without a meeting, to the taking of any action is specifically denied.

FIFTH, the affirmative vote of the holders of at least 66 2/3% of the outstanding shares entitled to vote in the election of directors shall be required to effect or validate (1) any merger or consolidation with or into any other corporation or (2) any sale or lease of all or a substantial part of the assets of this corporation to any other corporation, person or

other entity; provided that this Article FIFTH shall not apply to (a) any transaction if the board of directors of this corporation has approved a memorandum of understanding or other written agreement providing for such transaction or (b) any merger or consolidation of this corporation with, or any sale or lease by this corporation or any subsidiary thereof of any assets of, or any sale or lease by this corporation or any subsidiary thereof of any of its assets to, any corporation of which the majority of the outstanding shares of all classes of stock entitled to vote in election of directors is owned of record or beneficially by this corporation and its subsidiaries.

SIXTH, the liability of the directors of this corporation for monetary damages shall be eliminated to the fullest extent permissible under California law and applicable provisions of federal law.

SEVENTH, this corporation is authorized to provide indemnification of agents (as defined in Section 317(a) of the California Corporations Code) through bylaw provisions, agreements with agents, vote of shareholders or directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to (i) the applicable limits set forth in Section 204(a)(10) of the California Corporations Code, (ii) 12 U.S.C. § 1828(k) and the rules and regulations of the Federal Deposit Insurance Corporation thereunder and (iii) any other requirements or limitations imposed by state or federal laws or regulations.

EIGHTH, upon the effectiveness of this Article EIGHTH, shareholders shall not be permitted to elect directors by cumulative voting.

This Article EIGHTH shall become effective only when this corporation becomes a listed corporation within the meaning of Section 301.5 of the California Corporations Code, which section provides that a listed corporation means a corporation with outstanding shares listed on the New York Stock Exchange or a corporation with outstanding securities listed on the National Market System of the Nasdaq Stock Market (or any successor to that entity).

NINTH, the board of directors is authorized to adopt, amend and repeal bylaws of this corporation to the fullest extent permitted under applicable law. The shareholders may make, alter or repeal any bylaws whether or not adopted by them.

TENTH, any amendment, repeal or modification of Articles SIXTH or SEVENTH shall not adversely affect any right of protection of any director or agent of this corporation existing at the time of such amendment, repeal or modification.

ELEVENTH, the amendment or repeal of Article FOURTH, SIXTH, SEVENTH, EIGHTH or NINTH or this Article ELEVENTH of these Amended and Restated Articles of Incorporation, in any respect, or the adoption of any article or articles that are inconsistent with such Articles, in any respect, shall require prior approval by the affirmative vote of the holders of at least 66 2/3% of the outstanding shares entitled to vote.

TWELFTH, the Certificate of Determination for the 5.50% Noncumulative Perpetual Series D Preferred Stock, as filed on April 18, 2013, is attached hereto as Annex A and incorporated herein by reference.

THIRTEENTH, the Certificate of Determination for the 7.00% Noncumulative Perpetual Series E Preferred Stock, as filed on October 24, 2013, is attached hereto as Annex B and incorporated herein by reference.

FOURTEENTH, the Certificate of Determination for the 5.70% Noncumulative Perpetual Series F Preferred Stock, as filed on May 21, 2015, is attached hereto as Annex C and incorporated herein by reference.

FIFTEENTH, the Certificate of Determination for the 5.50% Noncumulative Perpetual Series G Preferred Stock, as filed on February 5, 2016, is attached hereto as Annex D and incorporated herein by reference.

SIXTEENTH, the Certificate of Determination for the 5.125% Noncumulative Perpetual Series H Preferred Stock, as filed on June 2, 2017, is attached hereto as Annex E and incorporated herein by reference.

Annex A

RESOLVED, that the Board, pursuant to Article Third of the Bank's Restated Articles of Incorporation, hereby authorizes the creation of a series of Preferred Stock of the Bank out of the authorized but unissued shares of the Preferred Stock of the Bank, such series to be designated 5.50% Noncumulative Perpetual Series D Preferred Stock, to consist of 200,000 shares, par value $0.01 per share, none of which are currently outstanding, the rights, privileges, preferences and restrictions of which shall be (in addition to those set forth in the Bank's Restated Articles of Incorporation, as amended) as follows:

Section 1. *Dividends.*

(a) Payment of Dividends. Holders of Series D Preferred Stock shall be entitled to receive, when, as and if authorized and declared by the Board (which shall include any authorized committee thereof), out of assets of the Bank legally available therefor, cash dividends at an annual rate of 5.50% of the $1,000.00 liquidation preference per share (equivalent to $55.00 per share per annum) (the "*Dividend Rate*"), and no more. Such cash dividends shall be noncumulative and payable, if authorized and declared, quarterly in arrears on each March 30, June 30, September 30 and December 30, commencing on June 30, 2013 (each such date, a "*Dividend Payment Date*"), or, if such day is not a day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated pursuant to legal requirements or executive order to be closed (each such day, a "*Business Day*"), on the immediately preceding Business Day, without adjustment. The amount of the dividend per share of Series D Preferred Stock on each Dividend Payment Date will be equal to the Dividend Rate multiplied by 0.25, then multiplied by $1,000 (with the result rounded upward, if necessary, to the nearest 0.00001 of 1%), except for the initial Dividend Payment Date, as described in the next paragraph. Each authorized and declared dividend shall be payable to holders of record of the Series D Preferred Stock as they appear on the stock books of the Bank at the close of business on such record date, not more than 60 calendar days nor less than 10 calendar days preceding the Dividend Payment Date therefor, as may be determined by the Board (each such date, a "*Record Date*"); *provided, however*, that if the date fixed for redemption of any of the Series D Preferred Stock occurs after a dividend is authorized and declared but before it is paid, such dividend shall be paid as part of the redemption price to the person to whom the redemption price is paid. Quarterly dividend periods (each, a "*Dividend Period*") shall commence on and include each Dividend Payment Date, and shall end on and exclude the following Dividend Payment Date (except that the first Dividend Period (i) for shares of Series D Preferred Stock issued in the initial issuance of Series D Preferred Stock shall commence on and include the initial date of issuance of shares of Series D Preferred Stock (the "*Issue Date*") and (ii) for shares of Series D Preferred Stock issued after the Issue Date shall commence on and include the later of the Issue

Date and the first day of the quarterly period in which such later date of issue occurs.

The amount of dividends payable for the Dividend Period commencing on the Issue Date shall be computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year composed of twelve 30-day months.

Holders of the Series D Preferred Stock shall not be entitled to any interest, or any sum of money in lieu of interest, in respect of any dividend payment or payments on the Series D Preferred Stock authorized and declared by the Board that may be unpaid. Any dividend payment made on the Series D Preferred Stock shall first be credited against the earliest authorized and declared but unpaid cash dividend with respect to the Series D Preferred Stock.

(b) Dividends Noncumulative. The right of holders of Series D Preferred Stock to receive dividends is noncumulative. Accordingly, except as hereinafter expressly provided, if the Board does not authorize or declare a dividend payable in respect of any Dividend Period, holders of Series D Preferred Stock shall have no right to receive a dividend in respect of such Dividend Period and the Bank shall have no obligation to pay a dividend in respect of such Dividend Period, whether or not dividends have been or are authorized and declared payable in respect of any prior or subsequent Dividend Period.

(c) Priority as to Dividends; Limitations on Dividends on Junior Stock. If full dividends on the Series D Preferred Stock for any completed Dividend Period shall not have been declared and paid, or declared and a sum sufficient for the payment thereof shall not have been set apart for such payments, no dividends or distributions shall be authorized, declared or paid or set aside for payment (other than as provided in the second paragraph of this Section 1(c)) with respect to the common stock or any other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series D Preferred Stock as to dividends or amounts distributed upon liquidation, dissolution or winding up of the affairs of the Bank (together with the common stock, "*Junior Stock*"), other than (x) dividends payable on Junior Stock in Junior Stock and (y) cash in lieu of fractional shares in connection with any such dividend, nor shall any Junior Stock or any stock ranking on parity with the Series D Preferred Stock as to dividends or amounts upon liquidation, dissolution or winding up of the affairs of the Bank ("*Parity Stock*") be redeemed, purchased or otherwise acquired for any consideration (or any monies to be paid to or made available for a sinking fund for the redemption of any such stock) by the Bank (except (x) by conversion into or exchange for other Junior Stock or (y) by the tendering of Junior Stock in payment for the exercise of stock options under our equity incentive plans then in effect), until such time as dividends on all outstanding Series D Preferred Stock have been authorized, declared and paid, or a sum sufficient for the payment thereof has been set apart for payment, as of the Dividend Payment Date for the current Dividend Period.

When dividends are not paid in full (or a sum sufficient for such full payment is not so set apart) for any Dividend Period on the Series D Preferred Stock, all dividends declared on the Series D Preferred Stock and any other series ranking on a parity as to dividends with the Series D Preferred Stock shall be declared *pro rata* so that the amount of dividends declared per share on the Series D Preferred Stock and each such other series of capital stock shall in all cases bear to each other the same ratio that full dividends, for the then current Dividend Period, per share of Series D Preferred Stock (which shall not include any accumulation in respect of unpaid dividends for prior Dividend Periods) and full dividends, including required or permitted accumulations, if any, on the stock of each such other series ranking on a parity as to dividends with the Series D Preferred Stock bear to each other.

(d) Dividend Reference. Any reference to "*dividends*" or "*distributions*" in this Section 1 shall not be deemed to include any distribution made in connection with any voluntary or involuntary dissolution, liquidation or winding up of the Bank.

Section 2. *Redemption*.

(a) Optional Redemption. Subject to the further terms and conditions provided herein, the Bank, at its option, subject to the approval of the "appropriate Federal banking agency" with respect to the Bank (as defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision) (the "*Appropriate Federal Banking Agency*"), may, upon notice given as provided in Section 2(d), redeem shares of the Series D Preferred Stock at the time outstanding in whole or in part, from time to time, on or after June 29, 2018, at a cash redemption price equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the redemption occurs, plus (iii) the amount of the accrued and unpaid dividends thereon (whether or not declared) from the beginning of the Dividend Period in which the redemption occurs to the date of redemption, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months (the "*Redemption Price*").

(b) Regulatory Event Redemption. Notwithstanding Section 2(a), the Bank, at its option, subject to the approval of the Appropriate Federal Banking Agency, may redeem all (but not less than all) of the shares of Series D Preferred Stock at the time outstanding, upon notice given as provided in section 2(d), at the Redemption Price at any time within 90 days following the Bank's good faith determination that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the Issue Date; (ii) any proposed change in such laws or regulations that is announced after the Issue Date; or (iii) any official administrative decision or judicial decision or administrative

action or other official pronouncement interpreting or applying those laws or regulations that is announced after the Issue Date, there is more than an insubstantial risk that the Bank will not be entitled to treat the full liquidation value of the shares of Series D Preferred Stock then outstanding as "Tier 1 Capital" (or its equivalent), as defined at 12 C.F.R. § 325.2(v) of the regulations of the Federal Deposit Insurance Corporation, or any successor regulation of the Federal Deposit Insurance Corporation (or, as and if applicable, the corresponding regulations of any successor Appropriate Federal Banking Agency), as then in effect and applicable, for as long as any share of Series D Preferred Stock is outstanding.

(c) Partial Redemption. In the event that fewer than all the outstanding shares of Series D Preferred Stock are to be redeemed, the number of shares of Series D Preferred Stock to be redeemed shall be determined by the Board, and the shares to be redeemed shall be determined by lot or *pro rata* as may be determined by the Board or by any other method as may be determined by the Board, in its sole discretion, to be fair and equitable, provided that such method satisfies any applicable requirements of any securities exchange (if any) on which the shares of Series D Preferred Stock are then listed.

Unless full dividends on the Series D Preferred Stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof has been set apart for payment for the then current Dividend Period, no Series D Preferred Stock shall be redeemed unless all outstanding Series D Preferred Stock are redeemed, and the Bank shall not purchase or otherwise acquire any Series D Preferred Stock; *provided, however*, that the Bank may purchase or acquire Series D Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series D Preferred Stock.

(d) Notice of Redemption. A notice by the Bank pursuant to this Section 2 shall be sufficiently given if in writing and mailed, first class postage prepaid, to each record holder of Series D Preferred Stock at the holder's address as it appears in the records of the Bank's transfer agent. In any case where notice is given by mail, neither the failure to mail such notice nor any defect in the notice to any particular holder shall affect the sufficiency of such notice to any other holder. Any notice mailed to a holder in the manner described above shall be deemed given on the date mailed, whether or not the holder actually receives the notice. A notice of redemption shall be given not less than 30 days and not more than 60 days prior to the date of redemption specified in the notice, and shall specify (i) the redemption date, (ii) the number of shares of Series D Preferred Stock to be redeemed, (iii) the Redemption Price and (iv) the manner in which holders of Series D Preferred Stock called for redemption may obtain payment of the Redemption Price in respect of those shares. Notwithstanding anything to the contrary in this paragraph, if the Series D Preferred Stock or any depositary shares representing interests in the Series D Preferred Stock are issued in book-entry

form through The Depositary Trust Company or any other similar facility, notice of redemption may be given to the holders of Series D Preferred Stock at such time and in any manner permitted by such facility.

(e) Effect of Redemption. Any shares of Series D Preferred Stock that are duly called for redemption pursuant to this Section 2 shall be deemed no longer to be outstanding for any purpose from and after that time that the Bank shall have irrevocably deposited with the paying agent identified in the notice of redemption funds in an amount equal to the aggregate redemption price. From and after that time, the holders of the Series D Preferred Stock so called for redemption shall have no further rights as shareholders of the Bank and in lieu thereof shall have only the right to receive the Redemption Price, without interest.

Series D Preferred Stock redeemed pursuant to this Section 2 or purchased or otherwise acquired for value by the Bank shall, after such acquisition, have the status of authorized and unissued shares of Preferred Stock and may be reissued by the Bank at any time as shares of any series of Preferred Stock other than as Series D Preferred Stock.

Section 3. *Liquidation Rights*.

(a) Liquidation Value. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Bank, the holders of the Series D Preferred Stock at the time outstanding will be entitled to receive out of assets of the Bank available for distribution to shareholders, before any distribution of assets is made to holders of Junior Stock, liquidating distributions in an amount equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the liquidation occurs, plus (iii) the amount of the declared and unpaid dividends thereon from the beginning of the Dividend Period in which the liquidation occurs to the date of liquidation, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months.

After payment of the full amount of the liquidating distributions to which they are entitled, pursuant to the preceding paragraph, the holders of Series D Preferred Stock will have no right or claim to any of the remaining assets of the Bank.

(b) Partial Payment. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Bank are insufficient to pay the amount of the liquidating distributions on all outstanding shares of Series D Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Bank ranking on a parity with the Series D Preferred Stock in the distribution of assets upon any liquidation, dissolution or winding up of the affairs of the Bank, then the holders

of the Series D Preferred Stock and such other classes or series of capital stock ranking on parity with the Series D Preferred Stock shall share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they otherwise respectively would be entitled.

(c) Consolidation, Merger or Sale of Assets not Liquidation. For the purposes of this Section 3, the merger or consolidation of the Bank with or into any other entity or by another entity with or into the Bank, or the sale, lease, conveyance, exchange or transfer (for cash, shares of stock, securities or other consideration) of all or substantially all of the property or business of the Bank, shall not be deemed to constitute the liquidation, dissolution or winding up of the Bank. If the Bank enters into any merger or consolidation transaction with or into any other entity and the Bank is not the surviving entity in such transaction, the Series D Preferred Stock may be converted into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series D Preferred Stock set forth herein.

Section 4. *Voting Rights.*

(a) General. Except as expressly provided in this Section 4 and as required by law, holders of Series D Preferred Stock shall have no voting rights. When the holders of Series D Preferred Stock are entitled to vote, each share of Series D Preferred Stock will be entitled to one vote.

(b) Right to Elect Directors.

(1) If at any time the Bank has failed to pay or set aside for payment scheduled dividends (whether or not declared) in an aggregate amount equal to at least six full quarterly dividend payments (whether or not consecutive) on the Series D Preferred Stock, the holders of the Series D Preferred Stock, voting as a single class together with the holders of each other series of Preferred Stock of the Bank then outstanding ranking on a parity with Series D Preferred Stock as to payment of dividends and having voting rights equivalent to those provided in this Section 4(b) for the Series D Preferred Stock ("*Voting Parity Stock*"), will be entitled to elect two directors (the "*Preferred Directors*") to serve on the Board, and the holders of all then outstanding shares of capital stock of the Bank otherwise entitled under the Bank's Restated Articles of Incorporation, as the same may be amended or restated from time to time, or by law to elect directors ("*Voting Stock*"), shall be entitled to elect the remaining number of authorized directors. The Board shall at no time have more than two Preferred Directors.

(2) If, at any time after the right to elect directors is vested in the Series D Preferred Stock, the holders of the Series D Preferred Stock

and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the holders of the Series D Preferred Stock and any Voting Parity Stock, voting as a single class, and the holders of the Voting Stock shall each elect directors at the special meeting as provided in Section 4(b)(1), the terms of office of all persons who were directors immediately prior to the special meeting shall terminate, and the directors elected by the holders of the Series D Preferred Stock and any Voting Parity Stock, as a single class, and the directors elected by the holders of the Voting Stock shall constitute the directors of the Bank until the next annual meeting.

If, at any time after the right to elect directors is vested in the Series D Preferred Stock, the holders of the Series D Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would not cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the terms of office of all persons who were directors immediately prior thereto shall continue until the next annual meeting.

(3) Whenever all dividends on the Series D Preferred Stock and any other Voting Parity Stock have been paid in full for four consecutive dividend periods (or otherwise for at least one year), then the right of the holders of Series D Preferred Stock to elect the Preferred Directors will cease (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future dividend periods), and if no other Voting Parity Stock is then entitled to elect directors, the terms of office of all Preferred Directors will immediately terminate.

(c) Removal and Replacement of Preferred Directors. Except as otherwise provided for by applicable law, any Preferred Director may be removed only by the vote of the holders of record of the outstanding Series D Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the shares of Series D Preferred Stock and all other Voting Parity Stock, called for that purpose. As long as the right to elect Preferred Directors is continuing, (i) any vacancy in the office of any Preferred Director may be filled by the vote of the holders of record of the outstanding Series D Preferred Stock entitled to vote, voting together as a single class with the holders of all other

Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the Series D Preferred Stock and all other Voting Parity Stock, called for that purpose, and (ii) in the case of the removal of any Preferred Director, the vacancy may be filled by the vote of the holders of the outstanding Series D Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at the same meeting at which such removal shall be voted. Until the time that any such vacancy is filled at a shareholder meeting as provided above, a successor shall be elected by the Board to serve until the next such shareholder meeting upon the nomination of the then remaining Preferred Director.

(d) Certain Voting Rights. The affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of each series of Preferred Stock of the Bank, including the Series D Preferred Stock, will be required (i) to create any class or series of stock which shall, as to dividends or distribution of assets, rank prior to any outstanding series of Preferred Stock of the Bank (other than a series which shall not have any right to object to such creation) or (ii) to alter or change the provisions of the Bank's Restated Articles of Incorporation (including the terms of the Series D Preferred Stock) or Bylaws, including by consolidation or merger, so as to adversely affect the voting powers, preferences or special rights of the holders of a series of Preferred Stock of the Bank; *provided, however,* that if such amendment shall not adversely affect all series of Preferred Stock of the Bank, such amendment need only be approved by at least two-thirds of the holders of shares of each series of Preferred Stock adversely affected thereby. Notwithstanding the foregoing, an alteration or change to the provisions of the Bank's Restated Articles of Incorporation or Bylaws shall not be deemed to affect the voting powers, preferences or special rights of the holders of the Series D Preferred Stock, provided that: (x) the Series D Preferred Stock remain outstanding with the terms thereof unchanged; or (y) the Series D Preferred Stock are converted in a merger or consolidation transaction into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series D Preferred Stock set forth herein. Additionally, (i) any increase in the amount of the authorized Common Stock or Preferred Stock or the creation or issuance of any other Junior Stock or Parity Stock and (ii) any change to the number of directors or number or classes of directors shall not be deemed to adversely affect the voting powers, preferences or special rights of the holders of the Series D Preferred Stock.

Section 5. *Ranking*.

(a) Ranking with Respect to Distributions upon Liquidation. With respect to rights upon liquidation, dissolution or winding up of the Bank, the Series D Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series D Preferred

Stock as to distributions upon liquidation, dissolution or winding up, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series D Preferred Stock as to distributions upon liquidation, dissolution or winding up, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series D Preferred Stock as to distributions upon liquidation, dissolution or winding up.

(b) Ranking with Respect to Dividends. With respect to dividends, the Series D Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series D Preferred Stock with respect to dividends, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series D Preferred Stock with respect to dividends, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series D Preferred Stock with respect to dividends.

Section 6. *No Conversion Rights*. The holders of Series D Preferred Stock shall not have any rights to convert such shares into shares of any other class or series of stock or into any other securities of, or any interest or property in, the Bank.

Section 7. *No Sinking Fund*. No sinking fund shall be established for the retirement or redemption of Series D Preferred Stock.

Section 8. *Preemptive or Subscription Rights*. No holder of Series D Preferred Stock of the Bank shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Bank or any other security of the Bank that it may issue or sell.

Section 9. *No Other Rights*. The Series D Preferred Stock shall not have any designations, preferences or relative, participating, optional or other special rights except as set forth in the Bank's Restated Articles of Incorporation or as otherwise required by law.

Section 10. *Compliance with Applicable Law*. Declaration by the Board and payment by the Bank of dividends to holders of the Series D Preferred

Stock and repurchase, redemption or other acquisition by the Bank (or another entity as provided in subsection (a) of Section 3 hereof) of Series D Preferred Stock shall be subject in all respects to any and all restrictions and limitations placed on dividends, redemptions or other distributions by the Bank (or any such other entity) under (i) laws, regulations and regulatory conditions or limitations applicable to or regarding the Bank (or any such other entity) from time to time and (ii) agreements with federal or state banking authorities with respect to the Bank (or any such other entity) from time to time in effect.

<u>**Annex B**</u>

RESOLVED, that the Board, pursuant to Article Third of the Bank's Restated Articles of Incorporation, hereby authorizes the creation of a series of Preferred Stock of the Bank out of the authorized but unissued shares of the Preferred Stock of the Bank, such series to be designated 7.00% Noncumulative Perpetual Series E Preferred Stock, to consist of 200,000 shares, par value $0.01 per share, none of which are currently outstanding, the rights, privileges, preferences and restrictions of which shall be (in addition to those set forth in the Bank's Restated Articles of Incorporation, as amended) as follows:

Section 1. *Dividends.*

(a) <u>Payment of Dividends</u>. Holders of Series E Preferred Stock shall be entitled to receive, when, as and if authorized and declared by the Board (which shall include any authorized committee thereof), out of funds of the Bank legally available therefor, cash dividends at an annual rate of 7.00% of the $1,000.00 liquidation preference per share (equivalent to $70.00 per share per annum) (the "*Dividend Rate*"), and no more. Such cash dividends shall be noncumulative and payable, if authorized and declared, quarterly in arrears on each March 30, June 30, September 30 and December 30, commencing on December 30, 2013 (each such date, a "*Dividend Payment Date*"), or, if such day is not a day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated pursuant to legal requirements or executive order to be closed (each such day, a "*Business Day*"), on the immediately preceding Business Day, without adjustment. The amount of the dividend per share of Series E Preferred Stock on each Dividend Payment Date will be equal to the Dividend Rate multiplied by 0.25, then multiplied by $1,000 (with the result rounded upward, if necessary, to the nearest 0.00001 of 1%), except for the initial Dividend Payment Date, as described in the next paragraph. Each authorized and declared dividend shall be payable to holders of record of the Series E Preferred Stock as they appear on the stock books of the Bank at the close of business on such record date, not more than 60 calendar days nor less than 10 calendar days preceding the Dividend Payment Date therefor, as may be determined by the Board (each such date, a "*Record Date*"); *provided, however*, that if the date fixed for redemption of any of the Series E Preferred Stock occurs after a dividend is authorized and declared but before it is paid, such dividend shall be paid as part of the redemption price to the person to whom the redemption price is paid. Quarterly dividend periods (each, a "*Dividend Period*") shall commence on and include each Dividend Payment Date, and shall end on and exclude the following Dividend Payment Date (except that the first Dividend Period (i) for shares of Series E Preferred Stock issued in the initial issuance of Series E Preferred Stock shall commence on and include the initial date of issuance of shares of Series E Preferred Stock (the "*Issue Date*") and (ii) for shares of Series E Preferred Stock issued after the Issue Date shall commence on

and include the later of the Issue Date and the first day of the quarterly period in which such later date of issue occurs.

The amount of dividends payable for the Dividend Period commencing on the Issue Date shall be computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year composed of twelve 30-day months.

Holders of the Series E Preferred Stock shall not be entitled to any interest, or any sum of money in lieu of interest, in respect of any dividend payment or payments on the Series E Preferred Stock authorized and declared by the Board that may be unpaid. Any dividend payment made on the Series E Preferred Stock shall first be credited against the earliest authorized and declared but unpaid cash dividend with respect to the Series E Preferred Stock.

(b) Dividends Noncumulative. The right of holders of Series E Preferred Stock to receive dividends is noncumulative. Accordingly, except as hereinafter expressly provided, if the Board does not authorize or declare a dividend payable in respect of any Dividend Period, holders of Series E Preferred Stock shall have no right to receive a dividend in respect of such Dividend Period and the Bank shall have no obligation to pay a dividend in respect of such Dividend Period, whether or not dividends have been or are authorized and declared payable in respect of any prior or subsequent Dividend Period.

(c) Priority as to Dividends; Limitations on Dividends on Junior Stock. If full dividends on the Series E Preferred Stock for any completed Dividend Period shall not have been declared and paid, or declared and a sum sufficient for the payment thereof shall not have been set apart for such payments, no dividends or distributions shall be authorized, declared or paid or set aside for payment (other than as provided in the second paragraph of this Section 1(c)) with respect to the common stock or any other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series E Preferred Stock as to dividends or amounts distributed upon liquidation, dissolution or winding up of the affairs of the Bank (together with the common stock, "*Junior Stock*"), other than (x) dividends payable on Junior Stock in Junior Stock and (y) cash in lieu of fractional shares in connection with any such dividend, nor shall any Junior Stock or any stock ranking on parity with the Series E Preferred Stock as to dividends or amounts upon liquidation, dissolution or winding up of the affairs of the Bank ("*Parity Stock*") be redeemed, purchased or otherwise acquired for any consideration (or any monies to be paid to or made available for a sinking fund for the redemption of any such stock) by the Bank (except (x) by conversion into or exchange for other Junior Stock or (y) by the tendering of Junior Stock in payment for the exercise of stock options under our equity incentive plans then in effect), until such time as dividends on all outstanding Series E Preferred Stock have been authorized, declared and paid, or a sum sufficient for the payment thereof has been set apart for payment, as of the Dividend Payment Date for the current Dividend Period.

When dividends are not paid in full (or a sum sufficient for such full payment is not so set apart) for any Dividend Period on the Series E Preferred Stock, all dividends declared on the Series E Preferred Stock and any other series ranking on a parity as to dividends with the Series E Preferred Stock shall be declared *pro rata* so that the amount of dividends declared per share on the Series E Preferred Stock and each such other series of capital stock shall in all cases bear to each other the same ratio that full dividends, for the then current Dividend Period, per share of Series E Preferred Stock (which shall not include any accumulation in respect of unpaid dividends for prior Dividend Periods) and full dividends, including required or permitted accumulations, if any, on the stock of each such other series ranking on a parity as to dividends with the Series E Preferred Stock bear to each other.

(d) Dividend Reference. Any reference to "*dividends*" or "*distributions*" in this Section 1 shall not be deemed to include any distribution made in connection with any voluntary or involuntary dissolution, liquidation or winding up of the Bank.

Section 2. *Redemption*.

(a) Optional Redemption. Subject to the further terms and conditions provided herein, the Bank, at its option, subject to the approval of the "appropriate Federal banking agency" with respect to the Bank (as defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision) (the "*Appropriate Federal Banking Agency*"), may, upon notice given as provided in Section 2(d), redeem shares of the Series E Preferred Stock at the time outstanding in whole or in part, from time to time, on or after December 28, 2018, at a cash redemption price equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the redemption occurs, plus (iii) the amount of the accrued and unpaid dividends thereon (whether or not declared) from the beginning of the Dividend Period in which the redemption occurs to the date of redemption, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months (the "*Redemption Price*").

(b) Regulatory Event Redemption. Notwithstanding Section 2(a), the Bank, at its option, subject to the approval of the Appropriate Federal Banking Agency, may redeem all (but not less than all) of the shares of Series E Preferred Stock at the time outstanding, upon notice given as provided in section 2(d), at the Redemption Price at any time within 90 days following the Bank's good faith determination that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the Issue Date; (ii) any proposed change in such laws or regulations that is announced after the Issue Date; or (iii) any official administrative decision or judicial decision or administrative

action or other official pronouncement interpreting or applying those laws or regulations that is announced after the Issue Date, there is more than an insubstantial risk that the Bank will not be entitled to treat the full liquidation value of the shares of Series E Preferred Stock then outstanding as "Tier 1 Capital" (or its equivalent), as defined at 12 C.F.R. § 325.2(v) of the regulations of the Federal Deposit Insurance Corporation, or any successor regulation of the Federal Deposit Insurance Corporation (or, as and if applicable, the corresponding regulations of any successor Appropriate Federal Banking Agency), as then in effect and applicable, for as long as any share of Series E Preferred Stock is outstanding.

(c) Partial Redemption. In the event that fewer than all the outstanding shares of Series E Preferred Stock are to be redeemed, the number of shares of Series E Preferred Stock to be redeemed shall be determined by the Board, and the shares to be redeemed shall be determined by lot or *pro rata* as may be determined by the Board.

Unless full dividends on the Series E Preferred Stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof has been set apart for payment for the then current Dividend Period, no Series E Preferred Stock shall be redeemed unless all outstanding Series E Preferred Stock are redeemed, and the Bank shall not purchase or otherwise acquire any Series E Preferred Stock; *provided, however*, that the Bank may purchase or acquire Series E Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series E Preferred Stock.

(d) Notice of Redemption. A notice by the Bank pursuant to this Section 2 shall be sufficiently given if in writing and mailed, first class postage prepaid, to each record holder of Series E Preferred Stock at the holder's address as it appears in the records of the Bank's transfer agent. In any case where notice is given by mail, neither the failure to mail such notice nor any defect in the notice to any particular holder shall affect the sufficiency of such notice to any other holder. Any notice mailed to a holder in the manner described above shall be deemed given on the date mailed, whether or not the holder actually receives the notice. A notice of redemption shall be given not less than 30 days and not more than 60 days prior to the date of redemption specified in the notice, and shall specify (i) the redemption date, (ii) the number of shares of Series E Preferred Stock to be redeemed, (iii) the Redemption Price and (iv) the manner in which holders of Series E Preferred Stock called for redemption may obtain payment of the Redemption Price in respect of those shares. Notwithstanding anything to the contrary in this paragraph, if the Series E Preferred Stock or any depositary shares representing interests in the Series E Preferred Stock are issued in book-entry form through The Depositary Trust Company or any other similar facility, notice of redemption may be given to the holders of Series E Preferred Stock at such time and in any manner permitted by such facility.

(e) Effect of Redemption. Any shares of Series E Preferred Stock that are duly called for redemption pursuant to this Section 2 shall be deemed no longer to be outstanding for any purpose from and after that time that the Bank shall have irrevocably deposited with the paying agent identified in the notice of redemption funds in an amount equal to the aggregate redemption price. From and after that time, the holders of the Series E Preferred Stock so called for redemption shall have no further rights as shareholders of the Bank and in lieu thereof shall have only the right to receive the Redemption Price, without interest.

Series E Preferred Stock redeemed pursuant to this Section 2 or purchased or otherwise acquired for value by the Bank shall, after such acquisition, have the status of authorized and unissued shares of Preferred Stock and may be reissued by the Bank at any time as shares of any series of Preferred Stock other than as Series E Preferred Stock.

Section 3. *Liquidation Rights*.

(a) Liquidation Value. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Bank, the holders of the Series E Preferred Stock at the time outstanding will be entitled to be paid out of assets of the Bank available for distribution to shareholders, before any distribution of assets is made to holders of Junior Stock, liquidating distributions in an amount equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the liquidation occurs, plus (iii) the amount of the declared and unpaid dividends thereon from the beginning of the Dividend Period in which the liquidation occurs to the date of liquidation, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months.

After payment of the full amount of the liquidating distributions to which they are entitled, pursuant to the preceding paragraph, the holders of Series E Preferred Stock will have no right or claim to any of the remaining assets of the Bank.

(b) Partial Payment. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Bank are insufficient to pay the amount of the liquidating distributions on all outstanding shares of Series E Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Bank ranking on a parity with the Series E Preferred Stock in the distribution of assets upon any liquidation, dissolution or winding up of the affairs of the Bank, then the holders of the Series E Preferred Stock and such other classes or series of capital stock ranking on parity with the Series E Preferred Stock shall share ratably in any such

distribution of assets in proportion to the full liquidating distributions to which they otherwise respectively would be entitled.

(c) Consolidation, Merger or Sale of Assets not Liquidation. For the purposes of this Section 3, the merger or consolidation of the Bank with or into any other entity or by another entity with or into the Bank, or the sale, lease, conveyance, exchange or transfer (for cash, shares of stock, securities or other consideration) of all or substantially all of the property or business of the Bank, shall not be deemed to constitute the liquidation, dissolution or winding up of the Bank. If the Bank enters into any merger or consolidation transaction with or into any other entity and the Bank is not the surviving entity in such transaction, the Series E Preferred Stock may be converted into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series E Preferred Stock set forth herein.

Section 4. *Voting Rights.*

(a) General. Except as expressly provided in this Section 4 and as required by law, holders of Series E Preferred Stock shall have no voting rights. When the holders of Series E Preferred Stock are entitled to vote, each share of Series E Preferred Stock will be entitled to one vote.

(b) Right to Elect Directors.

(1) If at any time the Bank has failed to pay or set aside for payment scheduled dividends (whether or not declared) in an aggregate amount equal to at least six full quarterly dividend payments (whether or not consecutive) on the Series E Preferred Stock, the holders of the Series E Preferred Stock, voting as a single class together with the holders of each other series of Preferred Stock of the Bank then outstanding ranking on a parity with Series E Preferred Stock as to payment of dividends and having voting rights equivalent to those provided in this Section 4(b) for the Series E Preferred Stock ("*Voting Parity Stock*"), will be entitled to elect two directors (the "*Preferred Directors*") to serve on the Board, and the holders of all then outstanding shares of capital stock of the Bank otherwise entitled under the Bank's Restated Articles of Incorporation, as the same may be amended or restated from time to time, or by law to elect directors ("*Voting Stock*"), shall be entitled to elect the remaining number of authorized directors. The Board shall at no time have more than two Preferred Directors.

(2) If, at any time after the right to elect directors is vested in the Series E Preferred Stock, the holders of the Series E Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the

election of the Preferred Directors to the Board would cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the holders of the Series E Preferred Stock and any Voting Parity Stock, voting as a single class, and the holders of the Voting Stock shall each elect directors at the special meeting as provided in Section 4(b)(1), the terms of office of all persons who were directors immediately prior to the special meeting shall terminate, and the directors elected by the holders of the Series E Preferred Stock and any Voting Parity Stock, as a single class, and the directors elected by the holders of the Voting Stock shall constitute the directors of the Bank until the next annual meeting.

If, at any time after the right to elect directors is vested in the Series E Preferred Stock, the holders of the Series E Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would not cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the terms of office of all persons who were directors immediately prior thereto shall continue until the next annual meeting.

(3) Whenever all dividends on the Series E Preferred Stock and any other Voting Parity Stock have been paid in full for four consecutive dividend periods (or otherwise for at least one year), then the right of the holders of Series E Preferred Stock to elect the Preferred Directors will cease (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future dividend periods), and if no other Voting Parity Stock is then entitled to elect directors, the terms of office of all Preferred Directors will immediately terminate.

(c) Removal and Replacement of Preferred Directors. Except as otherwise provided for by applicable law, any Preferred Director may be removed only by the vote of the holders of record of the outstanding Series E Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the shares of Series E Preferred Stock and all other Voting Parity Stock, called for that purpose. As long as the right to elect Preferred Directors is continuing, (i) any vacancy in the office of any Preferred Director may be filled by the vote of the holders of record of the outstanding Series E Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the Series E Preferred Stock and all other Voting Parity Stock, called for that purpose, and (ii) in the case of the removal of any Preferred Director, the vacancy

may be filled by the vote of the holders of the outstanding Series E Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at the same meeting at which such removal shall be voted. Until the time that any such vacancy is filled at a shareholder meeting as provided above, a successor shall be elected by the Board to serve until the next such shareholder meeting upon the nomination of the then remaining Preferred Director.

(d) Certain Voting Rights. The affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of each series of Preferred Stock of the Bank, including the Series E Preferred Stock, will be required (i) to create any class or series of stock which shall, as to dividends or distribution of assets, rank prior to any outstanding series of Preferred Stock of the Bank (other than a series which shall not have any right to object to such creation) or (ii) to alter or change the provisions of the Bank's Restated Articles of Incorporation (including the terms of the Series E Preferred Stock) or Bylaws, including by consolidation or merger, so as to adversely affect the voting powers, preferences or special rights of the holders of a series of Preferred Stock of the Bank; *provided, however,* that if such amendment shall not adversely affect all series of Preferred Stock of the Bank, such amendment need only be approved by at least two-thirds of the holders of shares of each series of Preferred Stock adversely affected thereby. Notwithstanding the foregoing, an alteration or change to the provisions of the Bank's Restated Articles of Incorporation or Bylaws shall not be deemed to affect the voting powers, preferences or special rights of the holders of the Series E Preferred Stock, provided that: (x) the Series E Preferred Stock remain outstanding with the terms thereof unchanged; or (y) the Series E Preferred Stock are converted in a merger or consolidation transaction into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series E Preferred Stock set forth herein. Additionally, (i) any increase in the amount of the authorized Common Stock or Preferred Stock or the creation or issuance of any other Junior Stock or Parity Stock and (ii) any change to the number of directors or number or classes of directors shall not be deemed to adversely affect the voting powers, preferences or special rights of the holders of the Series E Preferred Stock.

Section 5. *Ranking*.

(a) Ranking with Respect to Distributions upon Liquidation. With respect to rights upon liquidation, dissolution or winding up of the Bank, the Series E Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series E Preferred Stock as to distributions upon liquidation, dissolution or winding up, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative

Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series E Preferred Stock as to distributions upon liquidation, dissolution or winding up, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series E Preferred Stock as to distributions upon liquidation, dissolution or winding up.

(b) Ranking with Respect to Dividends. With respect to dividends, the Series E Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series E Preferred Stock with respect to dividends, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series E Preferred Stock with respect to dividends, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series E Preferred Stock with respect to dividends.

Section 6. *No Conversion Rights*. The holders of Series E Preferred Stock shall not have any rights to convert such shares into shares of any other class or series of stock or into any other securities of, or any interest or property in, the Bank.

Section 7. *No Sinking Fund*. No sinking fund shall be established for the retirement or redemption of Series E Preferred Stock.

Section 8. *Preemptive or Subscription Rights*. No holder of Series E Preferred Stock of the Bank shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Bank or any other security of the Bank that it may issue or sell.

Section 9. *No Other Rights*. The Series E Preferred Stock shall not have any designations, preferences or relative, participating, optional or other special rights except as set forth in the Bank's Restated Articles of Incorporation or as otherwise required by law.

Section 10. *Compliance with Applicable Law*. Declaration by the Board and payment by the Bank of dividends to holders of the Series E Preferred Stock and repurchase, redemption or other acquisition by the Bank (or another entity as provided in subsection (a) of Section 3 hereof) of Series E Preferred

Stock shall be subject in all respects to any and all restrictions and limitations placed on dividends, redemptions or other distributions by the Bank (or any such other entity) under (i) laws, regulations and regulatory conditions or limitations applicable to or regarding the Bank (or any such other entity) from time to time and (ii) agreements with federal or state banking authorities with respect to the Bank (or any such other entity) from time to time in effect.

Annex C

RESOLVED, that the Board, pursuant to Article Third of the Bank's Restated Articles of Incorporation, hereby authorizes the creation of a series of Preferred Stock of the Bank out of the authorized but unissued shares of the Preferred Stock of the Bank, such series to be designated 5.70% Noncumulative Perpetual Series F Preferred Stock, to consist of 115,000 shares, par value $0.01 per share, none of which are currently outstanding, the rights, privileges, preferences and restrictions of which shall be (in addition to those set forth in the Bank's Restated Articles of Incorporation, as amended) as follows:

Section 1. *Dividends.*

(a) Payment of Dividends. Holders of Series F Preferred Stock shall be entitled to receive, when, as and if authorized and declared by the Board (which shall include any authorized committee thereof), out of funds of the Bank legally available therefor, cash dividends at an annual rate of 5.70% of the $1,000.00 liquidation preference per share (equivalent to $57.00 per share per annum) (the "*Dividend Rate*"), and no more. Such cash dividends shall be noncumulative and payable, if authorized and declared, quarterly in arrears on each March 30, June 30, September 30 and December 30, commencing on June 30, 2015 (each such date, a "*Dividend Payment Date*"), or, if such day is not a day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated pursuant to legal requirements or executive order to be closed (each such day, a "*Business Day*"), on the immediately preceding Business Day, without adjustment. The amount of the dividend per share of Series F Preferred Stock on each Dividend Payment Date will be equal to the Dividend Rate multiplied by 0.25, then multiplied by $1,000 (with the result rounded upward, if necessary, to the nearest 0.00001 of 1%), except for the initial Dividend Payment Date, as described in the next paragraph. Each authorized and declared dividend shall be payable to holders of record of the Series F Preferred Stock as they appear on the stock books of the Bank at the close of business on such record date, not more than 60 calendar days nor less than 10 calendar days preceding the Dividend Payment Date therefor, as may be determined by the Board (each such date, a "*Record Date*"); *provided, however*, that if the date fixed for redemption of any of the Series F Preferred Stock occurs after a dividend is authorized and declared but before it is paid, such dividend shall be paid as part of the redemption price to the person to whom the redemption price is paid. Quarterly dividend periods (each, a "*Dividend Period*") shall commence on and include each Dividend Payment Date, and shall end on and exclude the following Dividend Payment Date (except that the first Dividend Period (i) for shares of Series F Preferred Stock issued in the initial issuance of Series F Preferred Stock shall commence on and include the initial date of issuance of shares of Series F Preferred Stock (the "*Issue Date*") and (ii) for shares of Series F Preferred Stock issued after the Issue Date shall commence on

and include the later of the Issue Date and the first day of the quarterly period in which such later date of issue occurs).

The amount of dividends payable for the Dividend Period commencing on the Issue Date shall be computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year composed of twelve 30-day months.

Holders of the Series F Preferred Stock shall not be entitled to any interest, or any sum of money in lieu of interest, in respect of any dividend payment or payments on the Series F Preferred Stock authorized and declared by the Board that may be unpaid. Any dividend payment made on the Series F Preferred Stock shall first be credited against the earliest authorized and declared but unpaid cash dividend with respect to the Series F Preferred Stock.

(b) Dividends Noncumulative. The right of holders of Series F Preferred Stock to receive dividends is noncumulative. Accordingly, except as hereinafter expressly provided, if the Board does not authorize or declare a dividend payable in respect of any Dividend Period, holders of Series F Preferred Stock shall have no right to receive a dividend in respect of such Dividend Period and the Bank shall have no obligation to pay a dividend in respect of such Dividend Period, whether or not dividends have been or are authorized and declared payable in respect of any prior or subsequent Dividend Period.

(c) Priority as to Dividends; Limitations on Dividends on Junior Stock. If full dividends on the Series F Preferred Stock for any completed Dividend Period shall not have been declared and paid, or declared and a sum sufficient for the payment thereof shall not have been set apart for such payments, no dividends or distributions shall be authorized, declared or paid or set aside for payment (other than as provided in the second paragraph of this Section 1(c)) with respect to the common stock or any other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series F Preferred Stock as to dividends or amounts distributed upon liquidation, dissolution or winding up of the affairs of the Bank (together with the common stock, "*Junior Stock*"), other than (x) dividends payable on Junior Stock in Junior Stock and (y) cash in lieu of fractional shares in connection with any such dividend, nor shall any Junior Stock or any stock ranking on parity with the Series F Preferred Stock as to dividends or amounts upon liquidation, dissolution or winding up of the affairs of the Bank ("*Parity Stock*") be redeemed, purchased or otherwise acquired for any consideration (or any monies to be paid to or made available for a sinking fund for the redemption of any such stock) by the Bank (except (x) by conversion into or exchange for other Junior Stock or (y) by the tendering of Junior Stock in payment for the exercise of stock options under our equity incentive plans then in effect), until such time as dividends on all outstanding Series F Preferred Stock have been authorized, declared and paid, or a sum sufficient for the payment thereof has been set apart for payment, as of the Dividend Payment Date for the current Dividend Period.

When dividends are not paid in full (or a sum sufficient for such full payment is not so set apart) for any Dividend Period on the Series F Preferred Stock, all dividends declared on the Series F Preferred Stock and any other series ranking on a parity as to dividends with the Series F Preferred Stock shall be declared *pro rata* so that the amount of dividends declared per share on the Series F Preferred Stock and each such other series of capital stock shall in all cases bear to each other the same ratio that full dividends, for the then current Dividend Period, per share of Series F Preferred Stock (which shall not include any accumulation in respect of unpaid dividends for prior Dividend Periods) and full dividends, including required or permitted accumulations, if any, on the stock of each such other series ranking on a parity as to dividends with the Series F Preferred Stock bear to each other.

(d) Dividend Reference. Any reference to "*dividends*" or "*distributions*" in this Section 1 shall not be deemed to include any distribution made in connection with any voluntary or involuntary dissolution, liquidation or winding up of the Bank.

Section 2. *Redemption*.

(a) Optional Redemption. Subject to the further terms and conditions provided herein, the Bank, at its option, subject to the approval of the "appropriate Federal banking agency" with respect to the Bank (as defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision) (the "*Appropriate Federal Banking Agency*"), may, upon notice given as provided in Section 2(d), redeem shares of the Series F Preferred Stock at the time outstanding in whole or in part, from time to time, on or after June 30, 2020, at a cash redemption price equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the redemption occurs, plus (iii) the amount of the accrued and unpaid dividends thereon (whether or not declared) from the beginning of the Dividend Period in which the redemption occurs to the date of redemption, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months (the "*Redemption Price*").

(b) Regulatory Event Redemption. Notwithstanding Section 2(a), the Bank, at its option, subject to the approval of the Appropriate Federal Banking Agency, may redeem all (but not less than all) of the shares of Series F Preferred Stock at the time outstanding, upon notice given as provided in section 2(d), at the Redemption Price at any time within 90 days following the Bank's good faith determination that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the Issue Date; (ii) any proposed change in such laws or regulations that is announced after the Issue Date; or (iii) any official administrative decision or judicial decision or administrative

action or other official pronouncement interpreting or applying those laws or regulations that is announced after the Issue Date, there is more than an insubstantial risk that the Bank will not be entitled to treat the full liquidation value of the shares of Series F Preferred Stock then outstanding as "Tier 1 Capital" (or its equivalent), as defined at 12 C.F.R. § 325.2(v) of the regulations of the Federal Deposit Insurance Corporation, or any successor regulation of the Federal Deposit Insurance Corporation (or, as and if applicable, the corresponding regulations of any successor Appropriate Federal Banking Agency), as then in effect and applicable, for as long as any share of Series F Preferred Stock is outstanding.

(c) Partial Redemption. In the event that fewer than all the outstanding shares of Series F Preferred Stock are to be redeemed, the number of shares of Series F Preferred Stock to be redeemed shall be determined by the Board, and the shares to be redeemed shall be determined by lot or *pro rata* as may be determined by the Board.

Unless full dividends on the Series F Preferred Stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof has been set apart for payment for the then current Dividend Period, no Series F Preferred Stock shall be redeemed unless all outstanding Series F Preferred Stock are redeemed, and the Bank shall not purchase or otherwise acquire any Series F Preferred Stock; *provided, however*, that the Bank may purchase or acquire Series F Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series F Preferred Stock.

(d) Notice of Redemption. A notice by the Bank pursuant to this Section 2 shall be sufficiently given if in writing and mailed, first class postage prepaid, to each record holder of Series F Preferred Stock at the holder's address as it appears in the records of the Bank's transfer agent. In any case where notice is given by mail, neither the failure to mail such notice nor any defect in the notice to any particular holder shall affect the sufficiency of such notice to any other holder. Any notice mailed to a holder in the manner described above shall be deemed given on the date mailed, whether or not the holder actually receives the notice. A notice of redemption shall be given not less than 30 days and not more than 60 days prior to the date of redemption specified in the notice, and shall specify (i) the redemption date, (ii) the number of shares of Series F Preferred Stock to be redeemed, (iii) the Redemption Price and (iv) the manner in which holders of Series F Preferred Stock called for redemption may obtain payment of the Redemption Price in respect of those shares. Notwithstanding anything to the contrary in this paragraph, if the Series F Preferred Stock or any depositary shares representing interests in the Series F Preferred Stock are issued in book-entry form through The Depositary Trust Company or any other similar facility, notice of redemption may be given to the holders of Series F Preferred Stock at such time and in any manner permitted by such facility.

(e) Effect of Redemption. Any shares of Series F Preferred Stock that are duly called for redemption pursuant to this Section 2 shall be deemed no longer to be outstanding for any purpose from and after that time that the Bank shall have irrevocably deposited with the paying agent identified in the notice of redemption funds in an amount equal to the aggregate redemption price. From and after that time, the holders of the Series F Preferred Stock so called for redemption shall have no further rights as shareholders of the Bank and in lieu thereof shall have only the right to receive the Redemption Price, without interest.

Series F Preferred Stock redeemed pursuant to this Section 2 or purchased or otherwise acquired for value by the Bank shall, after such acquisition, have the status of authorized and unissued shares of Preferred Stock and may be reissued by the Bank at any time as shares of any series of Preferred Stock other than as Series F Preferred Stock.

Section 3. *Liquidation Rights*.

(a) Liquidation Value. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Bank, the holders of the Series F Preferred Stock at the time outstanding will be entitled to be paid out of assets of the Bank available for distribution to shareholders, before any distribution of assets is made to holders of Junior Stock, liquidating distributions in an amount equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the liquidation occurs, plus (iii) the amount of the declared and unpaid dividends thereon from the beginning of the Dividend Period in which the liquidation occurs to the date of liquidation, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months.

After payment of the full amount of the liquidating distributions to which they are entitled, pursuant to the preceding paragraph, the holders of Series F Preferred Stock will have no right or claim to any of the remaining assets of the Bank.

(b) Partial Payment. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Bank are insufficient to pay the amount of the liquidating distributions on all outstanding shares of Series F Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Bank ranking on a parity with the Series F Preferred Stock in the distribution of assets upon any liquidation, dissolution or winding up of the affairs of the Bank, then the holders of the Series F Preferred Stock and such other classes or series of capital stock ranking on parity with the Series F Preferred Stock shall share ratably in any such

distribution of assets in proportion to the full liquidating distributions to which they otherwise respectively would be entitled.

(c) Consolidation, Merger or Sale of Assets not Liquidation. For the purposes of this Section 3, the merger or consolidation of the Bank with or into any other entity or by another entity with or into the Bank, or the sale, lease, conveyance, exchange or transfer (for cash, shares of stock, securities or other consideration) of all or substantially all of the property or business of the Bank, shall not be deemed to constitute the liquidation, dissolution or winding up of the Bank. If the Bank enters into any merger or consolidation transaction with or into any other entity and the Bank is not the surviving entity in such transaction, the Series F Preferred Stock may be converted into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series F Preferred Stock set forth herein.

Section 4. *Voting Rights.*

(a) General. Except as expressly provided in this Section 4 and as required by law, holders of Series F Preferred Stock shall have no voting rights. When the holders of Series F Preferred Stock are entitled to vote, each share of Series F Preferred Stock will be entitled to one vote.

(b) Right to Elect Directors.

(1) If at any time the Bank has failed to pay or set aside for payment scheduled dividends (whether or not declared) in an aggregate amount equal to at least six full quarterly dividend payments (whether or not consecutive) on the Series F Preferred Stock, the holders of the Series F Preferred Stock, voting as a single class together with the holders of each other series of Preferred Stock of the Bank then outstanding ranking on a parity with Series F Preferred Stock as to payment of dividends and having voting rights equivalent to those provided in this Section 4(b) for the Series F Preferred Stock ("*Voting Parity Stock*"), will be entitled to elect two directors (the "*Preferred Directors*") to serve on the Board, and the holders of all then outstanding shares of capital stock of the Bank otherwise entitled under the Bank's Restated Articles of Incorporation, as the same may be amended or restated from time to time, or by law to elect directors ("*Voting Stock*"), shall be entitled to elect the remaining number of authorized directors. The Board shall at no time have more than two Preferred Directors.

(2) If, at any time after the right to elect directors is vested in the Series F Preferred Stock, the holders of the Series F Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the

election of the Preferred Directors to the Board would cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the holders of the Series F Preferred Stock and any Voting Parity Stock, voting as a single class, and the holders of the Voting Stock shall each elect directors at the special meeting as provided in Section 4(b)(1), the terms of office of all persons who were directors immediately prior to the special meeting shall terminate, and the directors elected by the holders of the Series F Preferred Stock and any Voting Parity Stock, as a single class, and the directors elected by the holders of the Voting Stock shall constitute the directors of the Bank until the next annual meeting.

If, at any time after the right to elect directors is vested in the Series F Preferred Stock, the holders of the Series F Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would not cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the terms of office of all persons who were directors immediately prior thereto shall continue until the next annual meeting.

(3) Whenever all dividends on the Series F Preferred Stock and any other Voting Parity Stock have been paid in full for four consecutive dividend periods (or otherwise for at least one year), then the right of the holders of Series F Preferred Stock to elect the Preferred Directors will cease (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future dividend periods), and if no other Voting Parity Stock is then entitled to elect directors, the terms of office of all Preferred Directors will immediately terminate.

(c) Removal and Replacement of Preferred Directors. Except as otherwise provided for by applicable law, any Preferred Director may be removed only by the vote of the holders of record of the outstanding Series F Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the shares of Series F Preferred Stock and all other Voting Parity Stock, called for that purpose. As long as the right to elect Preferred Directors is continuing, (i) any vacancy in the office of any Preferred Director may be filled by the vote of the holders of record of the outstanding Series F Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the Series F Preferred Stock and all other Voting Parity Stock, called for that purpose, and (ii) in the case of the removal of any Preferred Director, the vacancy

may be filled by the vote of the holders of the outstanding Series F Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at the same meeting at which such removal shall be voted. Until the time that any such vacancy is filled at a shareholder meeting as provided above, a successor shall be elected by the Board to serve until the next such shareholder meeting upon the nomination of the then remaining Preferred Director.

(d) Certain Voting Rights. The affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of each series of Preferred Stock of the Bank, including the Series F Preferred Stock, will be required (i) to create any class or series of stock which shall, as to dividends or distribution of assets, rank prior to any outstanding series of Preferred Stock of the Bank (other than a series which shall not have any right to object to such creation) or (ii) to alter or change the provisions of the Bank's Restated Articles of Incorporation (including the terms of the Series F Preferred Stock) or Bylaws, including by consolidation or merger, so as to adversely affect the voting powers, preferences or special rights of the holders of a series of Preferred Stock of the Bank; *provided, however,* that if such amendment shall not adversely affect all series of Preferred Stock of the Bank, such amendment need only be approved by at least two-thirds of the holders of shares of each series of Preferred Stock adversely affected thereby. Notwithstanding the foregoing, an alteration or change to the provisions of the Bank's Restated Articles of Incorporation or Bylaws shall not be deemed to affect the voting powers, preferences or special rights of the holders of the Series F Preferred Stock, provided that: (x) the Series F Preferred Stock remain outstanding with the terms thereof unchanged; or (y) the Series F Preferred Stock are converted in a merger or consolidation transaction into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series F Preferred Stock set forth herein. Additionally, (i) any increase in the amount of the authorized Common Stock or Preferred Stock or the creation or issuance of any other Junior Stock or Parity Stock and (ii) any change to the number of directors or number or classes of directors shall not be deemed to adversely affect the voting powers, preferences or special rights of the holders of the Series F Preferred Stock.

Section 5. *Ranking*.

(a) Ranking with Respect to Distributions upon Liquidation. With respect to rights upon liquidation, dissolution or winding up of the Bank, the Series F Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series F Preferred Stock as to distributions upon liquidation, dissolution or winding up, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D

Preferred Stock, 7.00% Noncumulative Perpetual Series E Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series F Preferred Stock as to distributions upon liquidation, dissolution or winding up, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series F Preferred Stock as to distributions upon liquidation, dissolution or winding up.

(b) Ranking with Respect to Dividends. With respect to dividends, the Series F Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series F Preferred Stock with respect to dividends, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D Preferred Stock, 7.00% Noncumulative Perpetual Series E Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series F Preferred Stock with respect to dividends, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series F Preferred Stock with respect to dividends.

Section 6. *No Conversion Rights*. The holders of Series F Preferred Stock shall not have any rights to convert such shares into shares of any other class or series of stock or into any other securities of, or any interest or property in, the Bank.

Section 7. *No Sinking Fund*. No sinking fund shall be established for the retirement or redemption of Series F Preferred Stock.

Section 8. *Preemptive or Subscription Rights*. No holder of Series F Preferred Stock of the Bank shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Bank or any other security of the Bank that it may issue or sell.

Section 9. *No Other Rights*. The Series F Preferred Stock shall not have any designations, preferences or relative, participating, optional or other special rights except as set forth in the Bank's Restated Articles of Incorporation or as otherwise required by law.

Section 10. *Compliance with Applicable Law*. Declaration by the Board and payment by the Bank of dividends to holders of the Series F Preferred Stock and repurchase, redemption or other acquisition by the Bank (or another

entity as provided in subsection (a) of Section 3 hereof) of Series F Preferred Stock shall be subject in all respects to any and all restrictions and limitations placed on dividends, redemptions or other distributions by the Bank (or any such other entity) under (i) laws, regulations and regulatory conditions or limitations applicable to or regarding the Bank (or any such other entity) from time to time and (ii) agreements with federal or state banking authorities with respect to the Bank (or any such other entity) from time to time in effect.

Annex D

RESOLVED, that the Board, pursuant to Article Third of the Bank's Restated Articles of Incorporation, hereby authorizes the creation of a series of Preferred Stock of the Bank out of the authorized but unissued shares of the Preferred Stock of the Bank, such series to be designated 5.50% Noncumulative Perpetual Series G Preferred Stock, to consist of 172,500 shares, par value $0.01 per share, none of which are currently outstanding, the rights, privileges, preferences and restrictions of which shall be (in addition to those set forth in the Bank's Restated Articles of Incorporation, as amended) as follows:

Section 1. *Dividends.*

(a) Payment of Dividends. Holders of Series G Preferred Stock shall be entitled to receive, when, as and if authorized and declared by the Board (which shall include any authorized committee thereof), out of funds of the Bank legally available therefor, cash dividends at an annual rate of 5.50% of the $1,000.00 liquidation preference per share (equivalent to $55.00 per share per annum) (the "*Dividend Rate*"), and no more. Such cash dividends shall be noncumulative and payable, if authorized and declared, quarterly in arrears on each March 30, June 30, September 30 and December 30, commencing on March 30, 2016 (each such date, a "*Dividend Payment Date*"), or, if such day is not a day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated pursuant to legal requirements or executive order to be closed (each such day, a "*Business Day*"), on the immediately preceding Business Day, without adjustment. The amount of the dividend per share of Series G Preferred Stock on each Dividend Payment Date will be equal to the Dividend Rate multiplied by 0.25, then multiplied by $1,000 (with the result rounded upward, if necessary, to the nearest 0.00001 of 1%), except for the initial Dividend Payment Date, as described in the next paragraph. Each authorized and declared dividend shall be payable to holders of record of the Series G Preferred Stock as they appear on the stock books of the Bank at the close of business on such record date, not more than 60 calendar days nor less than 10 calendar days preceding the Dividend Payment Date therefor, as may be determined by the Board (each such date, a "*Record Date*"); *provided, however*, that if the date fixed for redemption of any of the Series G Preferred Stock occurs after a dividend is authorized and declared but before it is paid, such dividend shall be paid as part of the redemption price to the person to whom the redemption price is paid. Quarterly dividend periods (each, a "*Dividend Period*") shall commence on and include each Dividend Payment Date, and shall end on and exclude the following Dividend Payment Date (except that the first Dividend Period (i) for shares of Series G Preferred Stock issued in the initial issuance of Series G Preferred Stock shall commence on and include the initial date of issuance of shares of Series G Preferred Stock (the "*Issue Date*") and (ii) for shares of Series G Preferred Stock issued after the Issue Date shall commence on

and include the later of the Issue Date and the first day of the quarterly period in which such later date of issue occurs).

The amount of dividends payable for the Dividend Period commencing on the Issue Date shall be computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year composed of twelve 30-day months.

Holders of the Series G Preferred Stock shall not be entitled to any interest, or any sum of money in lieu of interest, in respect of any dividend payment or payments on the Series G Preferred Stock authorized and declared by the Board that may be unpaid. Any dividend payment made on the Series G Preferred Stock shall first be credited against the earliest authorized and declared but unpaid cash dividend with respect to the Series G Preferred Stock.

(b) Dividends Noncumulative. The right of holders of Series G Preferred Stock to receive dividends is noncumulative. Accordingly, except as hereinafter expressly provided, if the Board does not authorize or declare a dividend payable in respect of any Dividend Period, holders of Series G Preferred Stock shall have no right to receive a dividend in respect of such Dividend Period and the Bank shall have no obligation to pay a dividend in respect of such Dividend Period, whether or not dividends have been or are authorized and declared payable in respect of any prior or subsequent Dividend Period.

(c) Priority as to Dividends; Limitations on Dividends on Junior Stock. If full dividends on the Series G Preferred Stock for any completed Dividend Period shall not have been declared and paid, or declared and a sum sufficient for the payment thereof shall not have been set apart for such payments, no dividends or distributions shall be authorized, declared or paid or set aside for payment (other than as provided in the second paragraph of this Section 1(c)) with respect to the common stock or any other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series G Preferred Stock as to dividends or amounts distributed upon liquidation, dissolution or winding up of the affairs of the Bank (together with the common stock, "*Junior Stock*"), other than (x) dividends payable on Junior Stock in Junior Stock and (y) cash in lieu of fractional shares in connection with any such dividend, nor shall any Junior Stock or any stock ranking on parity with the Series G Preferred Stock as to dividends or amounts upon liquidation, dissolution or winding up of the affairs of the Bank ("*Parity Stock*") be redeemed, purchased or otherwise acquired for any consideration (or any monies to be paid to or made available for a sinking fund for the redemption of any such stock) by the Bank (except (x) by conversion into or exchange for other Junior Stock or (y) by the tendering of Junior Stock in payment for the exercise of stock options under our equity incentive plans then in effect), until such time as dividends on all outstanding Series G Preferred Stock have been authorized, declared and paid, or a sum sufficient for the payment thereof has been set apart for payment, as of the Dividend Payment Date for the current Dividend Period.

When dividends are not paid in full (or a sum sufficient for such full payment is not so set apart) for any Dividend Period on the Series G Preferred Stock, all dividends declared on the Series G Preferred Stock and any other series ranking on a parity as to dividends with the Series G Preferred Stock shall be declared *pro rata* so that the amount of dividends declared per share on the Series G Preferred Stock and each such other series of capital stock shall in all cases bear to each other the same ratio that full dividends, for the then current Dividend Period, per share of Series G Preferred Stock (which shall not include any accumulation in respect of unpaid dividends for prior Dividend Periods) and full dividends, including required or permitted accumulations, if any, on the stock of each such other series ranking on a parity as to dividends with the Series G Preferred Stock bear to each other.

(d) Dividend Reference. Any reference to "*dividends*" or "*distributions*" in this Section 1 shall not be deemed to include any distribution made in connection with any voluntary or involuntary dissolution, liquidation or winding up of the Bank.

Section 2. *Redemption*.

(a) Optional Redemption. Subject to the further terms and conditions provided herein, the Bank, at its option, subject to the approval of the "appropriate Federal banking agency" with respect to the Bank (as defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision) (the "*Appropriate Federal Banking Agency*"), may, upon notice given as provided in Section 2(d), redeem shares of the Series G Preferred Stock at the time outstanding in whole or in part, from time to time, on or after March 30, 2021, at a cash redemption price equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the redemption occurs, plus (iii) the amount of the accrued and unpaid dividends thereon (whether or not declared) from the beginning of the Dividend Period in which the redemption occurs to the date of redemption, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months (the "*Redemption Price*").

(b) Regulatory Event Redemption. Notwithstanding Section 2(a), the Bank, at its option, subject to the approval of the Appropriate Federal Banking Agency, may redeem all (but not less than all) of the shares of Series G Preferred Stock at the time outstanding, upon notice given as provided in section 2(d), at the Redemption Price at any time within 90 days following the Bank's good faith determination that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the Issue Date; (ii) any proposed change in such laws or regulations that is announced after the Issue Date; or (iii) any official administrative decision or judicial decision or administrative

action or other official pronouncement interpreting or applying those laws or regulations that is announced after the Issue Date, there is more than an insubstantial risk that the Bank will not be entitled to treat the full liquidation value of the shares of Series G Preferred Stock then outstanding as "Tier 1 Capital" (or its equivalent), as defined at 12 C.F.R. § 325.2(v) of the regulations of the Federal Deposit Insurance Corporation, or any successor regulation of the Federal Deposit Insurance Corporation (or, as and if applicable, the corresponding regulations of any successor Appropriate Federal Banking Agency), as then in effect and applicable, for as long as any share of Series G Preferred Stock is outstanding.

(c) Partial Redemption. In the event that fewer than all the outstanding shares of Series G Preferred Stock are to be redeemed, the number of shares of Series G Preferred Stock to be redeemed shall be determined by the Board, and the shares to be redeemed shall be determined by lot or *pro rata* as may be determined by the Board.

Unless full dividends on the Series G Preferred Stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof has been set apart for payment for the then current Dividend Period, no Series G Preferred Stock shall be redeemed unless all outstanding Series G Preferred Stock are redeemed, and the Bank shall not purchase or otherwise acquire any Series G Preferred Stock; *provided, however*, that the Bank may purchase or acquire Series G Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series G Preferred Stock.

(d) Notice of Redemption. A notice by the Bank pursuant to this Section 2 shall be sufficiently given if in writing and mailed, first class postage prepaid, to each record holder of Series G Preferred Stock at the holder's address as it appears in the records of the Bank's transfer agent. In any case where notice is given by mail, neither the failure to mail such notice nor any defect in the notice to any particular holder shall affect the sufficiency of such notice to any other holder. Any notice mailed to a holder in the manner described above shall be deemed given on the date mailed, whether or not the holder actually receives the notice. A notice of redemption shall be given not less than 30 days and not more than 60 days prior to the date of redemption specified in the notice, and shall specify (i) the redemption date, (ii) the number of shares of Series G Preferred Stock to be redeemed, (iii) the Redemption Price and (iv) the manner in which holders of Series G Preferred Stock called for redemption may obtain payment of the Redemption Price in respect of those shares. Notwithstanding anything to the contrary in this paragraph, if the Series G Preferred Stock or any depositary shares representing interests in the Series G Preferred Stock are issued in book-entry form through The Depositary Trust Company or any other similar facility, notice of redemption may be given to the holders of Series G Preferred Stock at such time and in any manner permitted by such facility.

(e) Effect of Redemption. Any shares of Series G Preferred Stock that are duly called for redemption pursuant to this Section 2 shall be deemed no longer to be outstanding for any purpose from and after that time that the Bank shall have irrevocably deposited with the paying agent identified in the notice of redemption funds in an amount equal to the aggregate redemption price. From and after that time, the holders of the Series G Preferred Stock so called for redemption shall have no further rights as shareholders of the Bank and in lieu thereof shall have only the right to receive the Redemption Price, without interest.

Series G Preferred Stock redeemed pursuant to this Section 2 or purchased or otherwise acquired for value by the Bank shall, after such acquisition, have the status of authorized and unissued shares of Preferred Stock and may be reissued by the Bank at any time as shares of any series of Preferred Stock other than as Series G Preferred Stock.

Section 3. *Liquidation Rights*.

(a) Liquidation Value. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Bank, the holders of the Series G Preferred Stock at the time outstanding will be entitled to be paid out of assets of the Bank available for distribution to shareholders, before any distribution of assets is made to holders of Junior Stock, liquidating distributions in an amount equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the liquidation occurs, plus (iii) the amount of the declared and unpaid dividends thereon from the beginning of the Dividend Period in which the liquidation occurs to the date of liquidation, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months.

After payment of the full amount of the liquidating distributions to which they are entitled, pursuant to the preceding paragraph, the holders of Series G Preferred Stock will have no right or claim to any of the remaining assets of the Bank.

(b) Partial Payment. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Bank are insufficient to pay the amount of the liquidating distributions on all outstanding shares of Series G Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Bank ranking on a parity with the Series G Preferred Stock in the distribution of assets upon any liquidation, dissolution or winding up of the affairs of the Bank, then the holders of the Series G Preferred Stock and such other classes or series of capital stock ranking on parity with the Series G Preferred Stock shall share ratably in any such

distribution of assets in proportion to the full liquidating distributions to which they otherwise respectively would be entitled.

(c) Consolidation, Merger or Sale of Assets not Liquidation. For the purposes of this Section 3, the merger or consolidation of the Bank with or into any other entity or by another entity with or into the Bank, or the sale, lease, conveyance, exchange or transfer (for cash, shares of stock, securities or other consideration) of all or substantially all of the property or business of the Bank, shall not be deemed to constitute the liquidation, dissolution or winding up of the Bank. If the Bank enters into any merger or consolidation transaction with or into any other entity and the Bank is not the surviving entity in such transaction, the Series G Preferred Stock may be converted into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series G Preferred Stock set forth herein.

Section 4. *Voting Rights.*

(a) General. Except as expressly provided in this Section 4 and as required by law, holders of Series G Preferred Stock shall have no voting rights. When the holders of Series G Preferred Stock are entitled to vote, each share of Series G Preferred Stock will be entitled to one vote.

(b) Right to Elect Directors.

(1) If at any time the Bank has failed to pay or set aside for payment scheduled dividends (whether or not declared) in an aggregate amount equal to at least six full quarterly dividend payments (whether or not consecutive) on the Series G Preferred Stock, the holders of the Series G Preferred Stock, voting as a single class together with the holders of each other series of Preferred Stock of the Bank then outstanding ranking on a parity with Series G Preferred Stock as to payment of dividends and having voting rights equivalent to those provided in this Section 4(b) for the Series G Preferred Stock ("*Voting Parity Stock*"), will be entitled to elect two directors (the "*Preferred Directors*") to serve on the Board, and the holders of all then outstanding shares of capital stock of the Bank otherwise entitled under the Bank's Restated Articles of Incorporation, as the same may be amended or restated from time to time, or by law to elect directors ("*Voting Stock*"), shall be entitled to elect the remaining number of authorized directors. The Board shall at no time have more than two Preferred Directors.

(2) If, at any time after the right to elect directors is vested in the Series G Preferred Stock, the holders of the Series G Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the

election of the Preferred Directors to the Board would cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the holders of the Series G Preferred Stock and any Voting Parity Stock, voting as a single class, and the holders of the Voting Stock shall each elect directors at the special meeting as provided in Section 4(b)(1), the terms of office of all persons who were directors immediately prior to the special meeting shall terminate, and the directors elected by the holders of the Series G Preferred Stock and any Voting Parity Stock, as a single class, and the directors elected by the holders of the Voting Stock shall constitute the directors of the Bank until the next annual meeting.

If, at any time after the right to elect directors is vested in the Series G Preferred Stock, the holders of the Series G Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would not cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the terms of office of all persons who were directors immediately prior thereto shall continue until the next annual meeting.

(3) Whenever all dividends on the Series G Preferred Stock and any other Voting Parity Stock have been paid in full for four consecutive dividend periods (or otherwise for at least one year), then the right of the holders of Series G Preferred Stock to elect the Preferred Directors will cease (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future dividend periods), and if no other Voting Parity Stock is then entitled to elect directors, the terms of office of all Preferred Directors will immediately terminate.

(c) Removal and Replacement of Preferred Directors. Except as otherwise provided for by applicable law, any Preferred Director may be removed only by the vote of the holders of record of the outstanding Series G Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the shares of Series G Preferred Stock and all other Voting Parity Stock, called for that purpose. As long as the right to elect Preferred Directors is continuing, (i) any vacancy in the office of any Preferred Director may be filled by the vote of the holders of record of the outstanding Series G Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the Series G Preferred Stock and all other Voting Parity Stock, called for that

purpose, and (ii) in the case of the removal of any Preferred Director, the vacancy may be filled by the vote of the holders of the outstanding Series G Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at the same meeting at which such removal shall be voted. Until the time that any such vacancy is filled at a shareholder meeting as provided above, a successor shall be elected by the Board to serve until the next such shareholder meeting upon the nomination of the then remaining Preferred Director.

(d) Certain Voting Rights. The affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of each series of Preferred Stock of the Bank, including the Series G Preferred Stock, will be required (i) to create any class or series of stock which shall, as to dividends or distribution of assets, rank prior to any outstanding series of Preferred Stock of the Bank (other than a series which shall not have any right to object to such creation) or (ii) to alter or change the provisions of the Bank's Restated Articles of Incorporation (including the terms of the Series G Preferred Stock) or Bylaws, including by consolidation or merger, so as to adversely affect the voting powers, preferences or special rights of the holders of a series of Preferred Stock of the Bank; *provided, however,* that if such amendment shall not adversely affect all series of Preferred Stock of the Bank, such amendment need only be approved by at least two-thirds of the holders of shares of each series of Preferred Stock adversely affected thereby. Notwithstanding the foregoing, an alteration or change to the provisions of the Bank's Restated Articles of Incorporation or Bylaws shall not be deemed to affect the voting powers, preferences or special rights of the holders of the Series G Preferred Stock, provided that: (x) the Series G Preferred Stock remain outstanding with the terms thereof unchanged; or (y) the Series G Preferred Stock are converted in a merger or consolidation transaction into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series G Preferred Stock set forth herein. Additionally, (i) any increase in the amount of the authorized Common Stock or Preferred Stock or the creation or issuance of any other Junior Stock or Parity Stock and (ii) any change to the number of directors or number or classes of directors shall not be deemed to adversely affect the voting powers, preferences or special rights of the holders of the Series G Preferred Stock.

Section 5. *Ranking*.

(a) Ranking with Respect to Distributions upon Liquidation. With respect to rights upon liquidation, dissolution or winding up of the Bank, the Series G Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series G Preferred Stock as to distributions upon liquidation, dissolution or winding up, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative

Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D Preferred Stock, 7.00% Noncumulative Perpetual Series E Preferred Stock, 5.70% Noncumulative Perpetual Series F Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series G Preferred Stock as to distributions upon liquidation, dissolution or winding up, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series G Preferred Stock as to distributions upon liquidation, dissolution or winding up.

(b) Ranking with Respect to Dividends. With respect to dividends, the Series G Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series G Preferred Stock with respect to dividends, (ii) on a parity with 6.70% Noncumulative Perpetual Series A Preferred Stock, 6.20% Noncumulative Perpetual Series B Preferred Stock, 5.625% Noncumulative Perpetual Series C Preferred Stock, 5.50% Noncumulative Perpetual Series D Preferred Stock, 7.00% Noncumulative Perpetual Series E Preferred Stock, 5.70% Noncumulative Perpetual Series F Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series G Preferred Stock with respect to dividends, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series G Preferred Stock with respect to dividends.

Section 6. *No Conversion Rights*. The holders of Series G Preferred Stock shall not have any rights to convert such shares into shares of any other class or series of stock or into any other securities of, or any interest or property in, the Bank.

Section 7. *No Sinking Fund*. No sinking fund shall be established for the retirement or redemption of Series G Preferred Stock.

Section 8. *Preemptive or Subscription Rights*. No holder of Series G Preferred Stock of the Bank shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Bank or any other security of the Bank that it may issue or sell.

Section 9. *No Other Rights*. The Series G Preferred Stock shall not have any designations, preferences or relative, participating, optional or other special rights except as set forth in the Bank's Restated Articles of Incorporation or as otherwise required by law.

Section 10. *Compliance with Applicable Law*. Declaration by the Board and payment by the Bank of dividends to holders of the Series G Preferred Stock and repurchase, redemption or other acquisition by the Bank (or another entity as provided in subsection (a) of Section 3 hereof) of Series G Preferred Stock shall be subject in all respects to any and all restrictions and limitations placed on dividends, redemptions or other distributions by the Bank (or any such other entity) under (i) laws, regulations and regulatory conditions or limitations applicable to or regarding the Bank (or any such other entity) from time to time and (ii) agreements with federal or state banking authorities with respect to the Bank (or any such other entity) from time to time in effect.

Annex E

RESOLVED, that the Board, pursuant to Article Third of the Bank's Restated Articles of Incorporation, hereby authorizes the creation of a series of Preferred Stock of the Bank out of the authorized but unissued shares of the Preferred Stock of the Bank, such series to be designated 5.125% Noncumulative Perpetual Series H Preferred Stock, to consist of 200,000 shares, par value $0.01 per share, none of which are currently outstanding, the rights, privileges, preferences and restrictions of which shall be (in addition to those set forth in the Bank's Restated Articles of Incorporation, as amended) as follows:

Section 1. *Dividends.*

(a) Payment of Dividends. Holders of Series H Preferred Stock shall be entitled to receive, when, as and if authorized and declared by the Board (which shall include any authorized committee thereof), out of funds of the Bank legally available therefor, cash dividends at an annual rate of 5.125% of the $1,000.00 liquidation preference per share (equivalent to $51.25 per share per annum) (the "*Dividend Rate*"), and no more. Such cash dividends shall be noncumulative and payable, if authorized and declared, quarterly in arrears on each March 30, June 30, September 30 and December 30, commencing on June 30, 2017 (each such date, a "*Dividend Payment Date*"), or, if such day is not a day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated pursuant to legal requirements or executive order to be closed (each such day, a "*Business Day*"), on the immediately preceding Business Day, without adjustment. The amount of the dividend per share of Series H Preferred Stock on each Dividend Payment Date will be equal to the Dividend Rate multiplied by 0.25, then multiplied by $1,000 (with the result rounded upward, if necessary, to the nearest 0.00001 of 1%), except for the initial Dividend Payment Date, as described in the next paragraph. Each authorized and declared dividend shall be payable to holders of record of the Series H Preferred Stock as they appear on the stock books of the Bank at the close of business on such record date, not more than 60 calendar days nor less than 10 calendar days preceding the Dividend Payment Date therefor, as may be determined by the Board (each such date, a "*Record Date*"); *provided, however*, that if the date fixed for redemption of any of the Series H Preferred Stock occurs after a dividend is authorized and declared but before it is paid, such dividend shall be paid as part of the redemption price to the person to whom the redemption price is paid. Quarterly dividend periods (each, a "*Dividend Period*") shall commence on and include each Dividend Payment Date, and shall end on and exclude the following Dividend Payment Date (except that the first Dividend Period (i) for shares of Series H Preferred Stock issued in the initial issuance of Series H Preferred Stock shall commence on and include the initial date of issuance of shares of Series H Preferred Stock (the "*Issue Date*") and (ii) for shares of Series H Preferred Stock issued after the Issue Date shall commence on

and include the later of the Issue Date and the first day of the quarterly period in which such later date of issue occurs).

The amount of dividends payable for the Dividend Period commencing on the Issue Date shall be computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year composed of twelve 30-day months.

Holders of the Series H Preferred Stock shall not be entitled to any interest, or any sum of money in lieu of interest, in respect of any dividend payment or payments on the Series H Preferred Stock authorized and declared by the Board that may be unpaid. Any dividend payment made on the Series H Preferred Stock shall first be credited against the earliest authorized and declared but unpaid cash dividend with respect to the Series H Preferred Stock.

(b) Dividends Noncumulative. The right of holders of Series H Preferred Stock to receive dividends is noncumulative. Accordingly, except as hereinafter expressly provided, if the Board does not authorize or declare a dividend payable in respect of any Dividend Period, holders of Series H Preferred Stock shall have no right to receive a dividend in respect of such Dividend Period and the Bank shall have no obligation to pay a dividend in respect of such Dividend Period, whether or not dividends have been or are authorized and declared payable in respect of any prior or subsequent Dividend Period.

(c) Priority as to Dividends; Limitations on Dividends on Junior Stock. If full dividends on the Series H Preferred Stock for any completed Dividend Period shall not have been declared and paid, or declared and a sum sufficient for the payment thereof shall not have been set apart for such payments, no dividends or distributions shall be authorized, declared or paid or set aside for payment (other than as provided in the second paragraph of this Section 1(c)) with respect to the common stock or any other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series H Preferred Stock as to dividends or amounts distributed upon liquidation, dissolution or winding up of the affairs of the Bank (together with the common stock, "*Junior Stock*"), other than (x) dividends payable on Junior Stock in Junior Stock and (y) cash in lieu of fractional shares in connection with any such dividend, nor shall any Junior Stock or any stock ranking on parity with the Series H Preferred Stock as to dividends or amounts upon liquidation, dissolution or winding up of the affairs of the Bank ("*Parity Stock*") be redeemed, purchased or otherwise acquired for any consideration (or any monies to be paid to or made available for a sinking fund for the redemption of any such stock) by the Bank (except (x) by conversion into or exchange for other Junior Stock or (y) by the tendering of Junior Stock in payment for the exercise of stock options under our equity incentive plans then in effect), until such time as dividends on all outstanding Series H Preferred Stock have been authorized, declared and paid, or a sum sufficient for the payment thereof has been set apart for payment, as of the Dividend Payment Date for the current Dividend Period.

When dividends are not paid in full (or a sum sufficient for such full payment is not so set apart) for any Dividend Period on the Series H Preferred Stock, all dividends declared on the Series H Preferred Stock and any other series ranking on a parity as to dividends with the Series H Preferred Stock shall be declared *pro rata* so that the amount of dividends declared per share on the Series H Preferred Stock and each such other series of capital stock shall in all cases bear to each other the same ratio that full dividends, for the then current Dividend Period, per share of Series H Preferred Stock (which shall not include any accumulation in respect of unpaid dividends for prior Dividend Periods) and full dividends, including required or permitted accumulations, if any, on the stock of each such other series ranking on a parity as to dividends with the Series H Preferred Stock bear to each other.

(d) Dividend Reference. Any reference to "*dividends*" or "*distributions*" in this Section 1 shall not be deemed to include any distribution made in connection with any voluntary or involuntary dissolution, liquidation or winding up of the Bank.

Section 2. *Redemption*.

(a) Optional Redemption. Subject to the further terms and conditions provided herein, the Bank, at its option, subject to the approval of the "appropriate Federal banking agency" with respect to the Bank (as defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision) (the "*Appropriate Federal Banking Agency*"), may, upon notice given as provided in Section 2(d), redeem shares of the Series H Preferred Stock at the time outstanding in whole or in part, from time to time, on or after June 30, 2022, at a cash redemption price equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the redemption occurs, plus (iii) the amount of the accrued and unpaid dividends thereon (whether or not declared) from the beginning of the Dividend Period in which the redemption occurs to, but excluding, the date of redemption, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months (the "*Redemption Price*").

(b) Regulatory Event Redemption. Notwithstanding Section 2(a), the Bank, at its option, subject to the approval of the Appropriate Federal Banking Agency, may redeem all (but not less than all) of the shares of Series H Preferred Stock at the time outstanding, upon notice given as provided in section 2(d), at the Redemption Price at any time within 90 days following the Bank's good faith determination that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the Issue Date; (ii) any proposed change in such laws or regulations that is announced after the Issue Date; or (iii) any official administrative decision or judicial decision or administrative

action or other official pronouncement interpreting or applying those laws or regulations that is announced after the Issue Date, there is more than an insubstantial risk that the Bank will not be entitled to treat the full liquidation value of the shares of Series H Preferred Stock then outstanding as "Tier 1 Capital" (or its equivalent), as defined at 12 C.F.R. § 325.2(v) of the regulations of the Federal Deposit Insurance Corporation, or any successor regulation of the Federal Deposit Insurance Corporation (or, as and if applicable, the corresponding regulations of any successor Appropriate Federal Banking Agency), as then in effect and applicable, for as long as any share of Series H Preferred Stock is outstanding.

(c) Partial Redemption. In the event that fewer than all the outstanding shares of Series H Preferred Stock are to be redeemed, the number of shares of Series H Preferred Stock to be redeemed shall be determined by the Board, and the shares to be redeemed shall be determined by lot or *pro rata* as may be determined by the Board.

Unless full dividends on the Series H Preferred Stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof has been set apart for payment for the then current Dividend Period, no Series H Preferred Stock shall be redeemed unless all outstanding Series H Preferred Stock are redeemed, and the Bank shall not purchase or otherwise acquire any Series H Preferred Stock; *provided, however*, that the Bank may purchase or acquire Series H Preferred Stock pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding Series H Preferred Stock.

(d) Notice of Redemption. A notice by the Bank pursuant to this Section 2 shall be sufficiently given if in writing and mailed, first class postage prepaid, to each record holder of Series H Preferred Stock at the holder's address as it appears in the records of the Bank's transfer agent. In any case where notice is given by mail, neither the failure to mail such notice nor any defect in the notice to any particular holder shall affect the sufficiency of such notice to any other holder. Any notice mailed to a holder in the manner described above shall be deemed given on the date mailed, whether or not the holder actually receives the notice. A notice of redemption shall be given not less than 30 days and not more than 60 days prior to the date of redemption specified in the notice, and shall specify (i) the redemption date, (ii) the number of shares of Series H Preferred Stock to be redeemed, (iii) the Redemption Price and (iv) the manner in which holders of Series H Preferred Stock called for redemption may obtain payment of the Redemption Price in respect of those shares. Notwithstanding anything to the contrary in this paragraph, if the Series H Preferred Stock or any depositary shares representing interests in the Series H Preferred Stock are issued in book-entry form through The Depositary Trust Company or any other similar facility, notice of redemption may be given to the holders of Series H Preferred Stock at such time and in any manner permitted by such facility.

(e) Effect of Redemption. Any shares of Series H Preferred Stock that are duly called for redemption pursuant to this Section 2 shall be deemed no longer to be outstanding for any purpose from and after that time that the Bank shall have irrevocably deposited with the paying agent identified in the notice of redemption funds in an amount equal to the aggregate redemption price. From and after that time, the holders of the Series H Preferred Stock so called for redemption shall have no further rights as shareholders of the Bank and in lieu thereof shall have only the right to receive the Redemption Price, without interest.

Series H Preferred Stock redeemed pursuant to this Section 2 or purchased or otherwise acquired for value by the Bank shall, after such acquisition, have the status of authorized and unissued shares of Preferred Stock and may be reissued by the Bank at any time as shares of any series of Preferred Stock other than as Series H Preferred Stock.

Section 3. *Liquidation Rights*.

(a) Liquidation Value. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Bank, the holders of the Series H Preferred Stock at the time outstanding will be entitled to be paid out of assets of the Bank available for distribution to shareholders, before any distribution of assets is made to holders of Junior Stock, liquidating distributions in an amount equal to the sum of (i) $1,000.00 per share plus (ii) the amount of any declared and unpaid dividends for any Dividend Period before the Dividend Period in which the liquidation occurs, plus (iii) the amount of the declared and unpaid dividends thereon from the beginning of the Dividend Period in which the liquidation occurs to the date of liquidation, computed on the basis of the number of days elapsed in the Dividend Period using a 360-day year comprised of twelve 30-day months.

After payment of the full amount of the liquidating distributions to which they are entitled, pursuant to the preceding paragraph, the holders of Series H Preferred Stock will have no right or claim to any of the remaining assets of the Bank.

(b) Partial Payment. In the event that, upon any such voluntary or involuntary liquidation, dissolution or winding up, the available assets of the Bank are insufficient to pay the amount of the liquidating distributions on all outstanding shares of Series H Preferred Stock and the corresponding amounts payable on all shares of other classes or series of capital stock of the Bank ranking on a parity with the Series H Preferred Stock in the distribution of assets upon any liquidation, dissolution or winding up of the affairs of the Bank, then the holders of the Series H Preferred Stock and such other classes or series of capital stock ranking on parity with the Series H Preferred Stock shall share ratably in any such

distribution of assets in proportion to the full liquidating distributions to which they otherwise respectively would be entitled.

(c) Consolidation, Merger or Sale of Assets not Liquidation. For the purposes of this Section 3, the merger or consolidation of the Bank with or into any other entity or by another entity with or into the Bank, or the sale, lease, conveyance, exchange or transfer (for cash, shares of stock, securities or other consideration) of all or substantially all of the property or business of the Bank, shall not be deemed to constitute the liquidation, dissolution or winding up of the Bank. If the Bank enters into any merger or consolidation transaction with or into any other entity and the Bank is not the surviving entity in such transaction, the Series H Preferred Stock may be converted into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series H Preferred Stock set forth herein.

Section 4. *Voting Rights.*

(a) General. Except as expressly provided in this Section 4 and as required by law, holders of Series H Preferred Stock shall have no voting rights. When the holders of Series H Preferred Stock are entitled to vote, each share of Series H Preferred Stock will be entitled to one vote.

(b) Right to Elect Directors.

(1) If at any time the Bank has failed to pay or set aside for payment scheduled dividends (whether or not declared) in an aggregate amount equal to at least six full quarterly dividend payments (whether or not consecutive) on the Series H Preferred Stock, the holders of the Series H Preferred Stock, voting as a single class together with the holders of each other series of Preferred Stock of the Bank then outstanding ranking on a parity with Series H Preferred Stock as to payment of dividends and having voting rights equivalent to those provided in this Section 4(b) for the Series H Preferred Stock ("*Voting Parity Stock*"), will be entitled to elect two directors (the "*Preferred Directors*") to serve on the Board, and the holders of all then outstanding shares of capital stock of the Bank otherwise entitled under the Bank's Restated Articles of Incorporation, as the same may be amended or restated from time to time, or by law to elect directors ("*Voting Stock*"), shall be entitled to elect the remaining number of authorized directors. The Board shall at no time have more than two Preferred Directors.

(2) If, at any time after the right to elect directors is vested in the Series H Preferred Stock, the holders of the Series H Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the

election of the Preferred Directors to the Board would cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the holders of the Series H Preferred Stock and any Voting Parity Stock, voting as a single class, and the holders of the Voting Stock shall each elect directors at the special meeting as provided in Section 4(b)(1), the terms of office of all persons who were directors immediately prior to the special meeting shall terminate, and the directors elected by the holders of the Series H Preferred Stock and any Voting Parity Stock, as a single class, and the directors elected by the holders of the Voting Stock shall constitute the directors of the Bank until the next annual meeting.

If, at any time after the right to elect directors is vested in the Series H Preferred Stock, the holders of the Series H Preferred Stock and any Voting Parity Stock call a special meeting of shareholders for the election of directors, and at the time the special meeting is called, the election of the Preferred Directors to the Board would not cause the number of directors to exceed the maximum number authorized under the Bank's Restated Articles of Incorporation or Bylaws, each as amended from time to time, then the terms of office of all persons who were directors immediately prior thereto shall continue until the next annual meeting.

(3) Whenever all dividends on the Series H Preferred Stock and any other Voting Parity Stock have been paid in full for four consecutive dividend periods (or otherwise for at least one year), then the right of the holders of Series H Preferred Stock to elect the Preferred Directors will cease (but subject always to the same provisions for the vesting of these voting rights in the case of any similar non-payment of dividends in respect of future dividend periods), and if no other Voting Parity Stock is then entitled to elect directors, the terms of office of all Preferred Directors will immediately terminate.

(c) Removal and Replacement of Preferred Directors. Except as otherwise provided for by applicable law, any Preferred Director may be removed only by the vote of the holders of record of the outstanding Series H Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the shares of Series H Preferred Stock and all other Voting Parity Stock, called for that purpose. As long as the right to elect Preferred Directors is continuing, (i) any vacancy in the office of any Preferred Director may be filled by the vote of the holders of record of the outstanding Series H Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at a meeting of the Bank's shareholders, or of the holders of the Series H Preferred Stock and all other Voting Parity Stock, called for that

purpose, and (ii) in the case of the removal of any Preferred Director, the vacancy may be filled by the vote of the holders of the outstanding Series H Preferred Stock entitled to vote, voting together as a single class with the holders of all other Voting Parity Stock, at the same meeting at which such removal shall be voted. Until the time that any such vacancy is filled at a shareholder meeting as provided above, a successor shall be elected by the Board to serve until the next such shareholder meeting upon the nomination of the then remaining Preferred Director.

(d) Certain Voting Rights. The affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of each series of Preferred Stock of the Bank, including the Series H Preferred Stock, will be required (i) to create any class or series of stock which shall, as to dividends or distribution of assets, rank prior to any outstanding series of Preferred Stock of the Bank (other than a series which shall not have any right to object to such creation) or (ii) to alter or change the provisions of the Bank's Restated Articles of Incorporation (including the terms of the Series H Preferred Stock) or Bylaws, including by consolidation or merger, so as to adversely affect the voting powers, preferences or special rights of the holders of a series of Preferred Stock of the Bank; *provided, however,* that if such amendment shall not adversely affect all series of Preferred Stock of the Bank, such amendment need only be approved by at least two-thirds of the holders of shares of each series of Preferred Stock adversely affected thereby. Notwithstanding the foregoing, an alteration or change to the provisions of the Bank's Restated Articles of Incorporation or Bylaws shall not be deemed to affect the voting powers, preferences or special rights of the holders of the Series H Preferred Stock, provided that: (x) the Series H Preferred Stock remain outstanding with the terms thereof unchanged; or (y) the Series H Preferred Stock are converted in a merger or consolidation transaction into shares of the surviving or successor corporation or the direct or indirect parent of the surviving or successor corporation having terms identical to the terms of the Series H Preferred Stock set forth herein. Additionally, (i) any increase in the amount of the authorized Common Stock or Preferred Stock or the creation or issuance of any other Junior Stock or Parity Stock and (ii) any change to the number of directors or number or classes of directors shall not be deemed to adversely affect the voting powers, preferences or special rights of the holders of the Series H Preferred Stock.

Section 5. *Ranking*.

(a) Ranking with Respect to Distributions upon Liquidation. With respect to rights upon liquidation, dissolution or winding up of the Bank, the Series H Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series H Preferred Stock as to distributions upon liquidation, dissolution or winding up, (ii) on a parity with the 6.20% Noncumulative Perpetual Series B Preferred Stock, the 5.625% Noncumulative Perpetual Series C Preferred Stock, the 5.50%

Noncumulative Perpetual Series D Preferred Stock, the 7.00% Noncumulative Perpetual Series E Preferred Stock, the 5.70% Noncumulative Perpetual Series F Preferred Stock, the 5.50% Noncumulative Perpetual Series G Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series H Preferred Stock as to distributions upon liquidation, dissolution or winding up, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series H Preferred Stock as to distributions upon liquidation, dissolution or winding up.

(b) Ranking with Respect to Dividends. With respect to dividends, the Series H Preferred Stock shall rank: (i) senior to the Common Stock and to all other classes or series of stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they are junior to the Series H Preferred Stock with respect to dividends, (ii) on a parity with the 6.20% Noncumulative Perpetual Series B Preferred Stock, the 5.625% Noncumulative Perpetual Series C Preferred Stock, the 5.50% Noncumulative Perpetual Series D Preferred Stock, the 7.00% Noncumulative Perpetual Series E Preferred Stock, the 5.70% Noncumulative Perpetual Series F Preferred Stock, the 5.50% Noncumulative Perpetual Series G Preferred Stock and all other classes or series of Preferred Stock of the Bank now or hereafter authorized, issued or outstanding that expressly provide that they will rank on parity with the Series H Preferred Stock with respect to dividends, and (iii) junior to all other classes or series of Preferred Stock of the Corporation now or hereafter authorized, issued or outstanding that expressly provide that they are senior to the Series H Preferred Stock with respect to dividends.

Section 6. *No Conversion Rights*. The holders of Series H Preferred Stock shall not have any rights to convert such shares into shares of any other class or series of stock or into any other securities of, or any interest or property in, the Bank.

Section 7. *No Sinking Fund*. No sinking fund shall be established for the retirement or redemption of Series H Preferred Stock.

Section 8. *Preemptive or Subscription Rights*. No holder of Series H Preferred Stock of the Bank shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Bank or any other security of the Bank that it may issue or sell.

Section 9. *No Other Rights*. The Series H Preferred Stock shall not have any designations, preferences or relative, participating, optional or other special rights except as set forth in the Bank's Restated Articles of Incorporation or as otherwise required by law.

Section 10. *Compliance with Applicable Law*. Declaration by the Board and payment by the Bank of dividends to holders of the Series H Preferred Stock and repurchase, redemption or other acquisition by the Bank (or another entity as provided in subsection (a) of Section 3 hereof) of Series H Preferred Stock shall be subject in all respects to any and all restrictions and limitations placed on dividends, redemptions or other distributions by the Bank (or any such other entity) under (i) laws, regulations and regulatory conditions or limitations applicable to or regarding the Bank (or any such other entity) from time to time and (ii) agreements with federal or state banking authorities with respect to the Bank (or any such other entity) from time to time in effect.

EXHIBIT 12

FIRST REPUBLIC BANK

STATEMENT OF COMPUTATION OF RATIOS OF:
EARNINGS TO FIXED CHARGES AND
EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

($ in thousands)	Year Ended December 31, 2017	2016	2015	2014	2013
Earnings before adjustment for fixed charges:					
Earnings before adjustment for fixed charges	$ 912,202	$ 827,596	$690,668	$669,883	$663,559
Fixed charges and preferred stock dividend requirements:					
I. Excluding interest on deposits:					
Interest on borrowings	$ 165,369	$ 89,946	$ 86,357	$ 91,795	$ 71,026
Estimated interest component of net rental expense	29,442	25,358	21,400	18,733	17,658
Total fixed charges, excluding interest on deposits	194,811	115,304	107,757	110,528	88,684
Preferred stock dividend requirements	100,415	118,666	102,483	96,619	70,732
Fixed charges and preferred stock dividend requirements	$ 295,226	$ 233,970	$210,240	$207,147	$159,416
Earnings, including fixed charges	$1,107,013	$ 942,900	$798,425	$780,411	$752,243
Ratio of earnings to fixed charges	5.68x	8.18x	7.41x	7.06x	8.48x
Ratio of earnings to fixed charges and preferred stock dividend requirements	3.75x	4.03x	3.80x	3.77x	4.72x
II. Including interest on deposits:					
Interest on borrowings	$ 165,369	$ 89,946	$ 86,357	$ 91,795	$ 71,026
Estimated interest component of net rental expense	29,442	25,358	21,400	18,733	17,658
Interest on deposits	134,786	73,765	61,072	60,454	60,817
Total fixed charges, including interest on deposits	329,597	189,069	168,829	170,982	149,501
Preferred stock dividend requirements	100,415	118,666	102,483	96,619	70,732
Fixed charges and preferred stock dividend requirements	$ 430,012	$ 307,735	$271,312	$267,601	$220,233
Earnings, including fixed charges	$1,241,799	$1,016,665	$859,497	$840,865	$813,060
Ratio of earnings to fixed charges	3.77x	5.38x	5.09x	4.92x	5.44x
Ratio of earnings to fixed charges and preferred stock dividend requirements	2.89x	3.30x	3.17x	3.14x	3.69x

EXHIBIT 21

FIRST REPUBLIC BANK

SUBSIDIARIES

The following is a list of the subsidiaries of First Republic Bank as of December 31, 2017:

Subsidiary	State of Incorporation or Organization
First Republic Lending Corporation	Nevada
First Republic Investment Management, Inc.	New York
First Republic Securities Company, LLC	Nevada
First Republic Trust Company of Delaware LLC	Delaware
Gradifi, Inc.	Delaware

EXHIBIT 31.1

CERTIFICATION

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

1. I have reviewed this annual report on Form 10-K of First Republic Bank;

2. Based on my knowledge, this annual 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 annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual 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 annual 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 annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

   (d) Disclosed in this annual 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: February 28, 2018

/s/ James H. Herbert, II

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

EXHIBIT 31.2

CERTIFICATION

I, Michael J. Roffler, certify that:

1. I have reviewed this annual report on Form 10-K of First Republic Bank;

2. Based on my knowledge, this annual 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 annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual 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 annual 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 annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

   (d) Disclosed in this annual report any change in the registrant's internal controls 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: February 28, 2018

/s/ Michael J. Roffler

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

EXHIBIT 32.1

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

The undersigned, the Chairman and Chief Executive Officer of First Republic Bank (the “Company”), hereby certifies on the date hereof, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K for the year ended December 31, 2017 (the “Form 10-K”), 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-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2018

/s/ James H. Herbert, II

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

EXHIBIT 32.2

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

The undersigned, the Executive Vice President and Chief Financial Officer of First Republic Bank (the "Company"), hereby certifies on the date hereof, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K for the year ended December 31, 2017 (the "Form 10-K"), 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-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2018

/s/ Michael J. Roffler

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