# 2018 ANNUAL REPORT

SIGNATURE BANK

VISION. DETERMINATION. EXECUTION.

VETERAN BANKING TEAMS

DEPOSITOR FOCUSED

SIGNET™

SAFE & SECURE

CLIENT-CENTRIC BUSINESS MODEL

SINGLE-POINT-OF-CONTACT APPROACH

## COMPANY PROFILE

**Signature Bank** (Nasdaq:SBNY), member FDIC, is a full-service commercial bank with 30 private client offices located throughout the New York metropolitan area. In 2018, the Bank expanded its footprint on the West Coast with the opening of its first full-service private client banking office in San Francisco. The Bank primarily serves privately owned businesses, their owners and senior managers. Signature Bank offers a broad range of business and personal banking products and services as well as investment, brokerage, asset management and insurance products and services through its subsidiary, Signature Securities Group Corporation, a licensed broker-dealer, investment adviser and member FINRA/SIPC. In addition, Signature Bank's wholly owned specialty finance subsidiary, Signature Financial LLC, provides equipment financing and leasing.

In December 2018, Signature Bank unveiled its revolutionary digital payments platform, Signet™, designed to enable real-time payments for its commercial clients. The Signet Platform, which leverages blockchain technology, allows Signature Bank's commercial clients to make payments in U.S. dollars, 24 hours a day, seven days a week, 365 days a year. Transactions made on the Signet Platform settle in real time, are safe and secure, and incur no transaction fees. Signature Bank is the first FDIC-insured bank to launch a blockchain-based digital payments platform. Signet is the first such platform to be approved for use by the New York State Department of Financial Services.

### FINANCIAL HIGHLIGHTS

*(in thousands)*

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Total assets | $ 27,318,640 | 33,450,545 | 39,047,611 | 43,117,720 | **47,364,816** |
| Total loans | 17,857,708 | 23,792,564 | 29,043,165 | 32,612,539 | **36,423,127** |
| Total deposits | 22,620,275 | 26,773,923 | 31,861,260 | 33,439,827 | **36,378,773** |
| Total average deposits | 19,931,415 | 25,293,565 | 29,747,824 | 33,158,234 | **35,143,194** |
| Shareholders' equity | 2,496,238 | 2,891,834 | 3,612,264 | 4,031,691 | **4,407,140** |
| Net interest income after provision for loan and lease losses | 770,041 | 932,187 | 991,468 | 974,289 | **1,136,463** |
| Non-interest income | 34,982 | 37,104 | 42,750 | 36,041 | **23,278** |
| Non-interest expense | 293,244 | 341,214 | 376,771 | 435,066 | **486,278** |
| Income before income taxes | 511,779 | 628,077 | 657,447 | 575,264 | **673,463** |
| Net income | $ 296,704 | 373,065 | 396,324 | 387,209 | **505,342** |

**Signature Bank Co-founders**
*(pictured from left to right):*
*Joseph J. DePaolo, President and Chief Executive Officer;*
*Scott A. Shay, Chairman of the Board; and,*
*John Tamberlane, Vice Chairman*

The vision for Signature Bank was borne from a determination to fill a void in relationship banking. We envisioned building a better model, one where experienced banking professionals would lead teams of bankers, serving as a single point of contact for meeting clients' needs. Our core focus would be on catering to privately owned businesses, a niche underserved by the dominant megabanks.

This distinctive model became the backbone of our business and culture as well as the strength of our enterprise. Over nearly 18 years, we've built a reputation on our hallmark of service and client care.

Sticking to this credo has allowed Signature Bank to emerge as one of the top 40 largest banks in the U.S., based on deposits, according to *S&P Global Market Intelligence*.

Despite the volatile times the banking industry has faced of late, our vision to create the premier relationship-based bank has been a key driving force in our execution. In 2018, we not only persevered but also continued to perform, with growth in deposits reaching nearly $3 billion year-over-year, amid the most challenging deposit environment we have ever witnessed. We are determined to stay with our founding mission to remain a leader in serving privately owned businesses, their owners and senior managers and ended the year among the leading dominant deposit franchises in the country.

## Determined to Execute Our Vision

Our single-point-of-contact approach to private client banking has long distinguished Signature Bank in the commercial banking marketplace. It is the structure of our model that allows us to successfully compete with various types of commercial banks, especially the megabanks.

Since we founded the institution in 2001, our determination and consistent execution of our model has become our competitive advantage in the commercial banking arena.

We are dedicated to attracting and retaining teams of talented banking professionals. These Private Client Banking Teams, led by Group Directors, are comprised of experienced banking professionals, capable of meeting all client needs. Unlike at larger megabanks, here at Signature Bank, clients rely on their designated bankers and teams to handle all their needs. We grow our network as we identify relevant bankers and expand our physical footprint only once seasoned teams are identified.

To this end, during 2018, Signature Bank continued to demonstrate pure organic growth through team expansion. We added eight Private Client Banking Teams, and as a result, obtained more core clients, which led to increased core deposit growth. We also expanded our franchise on the West Coast, with the opening of a financial center in downtown San Francisco, staffed with three teams. While we have been serving clients on the West Coast for some time, we deemed it the right time to formally make our entry with an official private client banking office.

During 2018, we created a new business line with the establishment of our Fund Banking Division. To lead this endeavor, we appointed a team well-known in this area, which focuses on providing financing and banking services to the private equity industry. Signature Bank's Fund Banking Division, based in Midtown Manhattan, offers subscription lines of credit, management company lines of credit and general partner loans, specifically targeted to private equity firms. A top priority for the Bank is to position the Fund Banking Division for strong growth, which will eventually span a much larger portion of our business.

The efforts of our Fund Banking Division are expected to contribute to transforming our balance sheet over time.

Given that our loan portfolio is primarily fixed in nature, adding floating rate assets is complementary and provides balance as we evolve our asset mix over the long term. The addition of floating rate assets will help to alleviate pressures should interest rates continue to increase. Over time, this will allow us to reduce interest rate risk.

Of key importance during 2018 was the passage of Senate Bill 2155. This moved the threshold for a Systemically Important Financial Institution (SIFI) from $50 billion to $250 billion. This is a very positive development for Signature Bank as we will not be subject to the same regulations as the megabanks.

## Investing in the Future

At the end of 2018, Signature Bank unveiled its revolutionary digital payments platform, Signet™. The Signet Platform, which leverages blockchain technology, allows Signature Bank's commercial clients to make payments in U.S. dollars, 24 hours a day, seven days a week, 365 days a year. Transactions made on the Signet Platform settle in real time, are safe and secure, and incur no transaction fees. Signature Bank is the first FDIC-insured bank to launch a blockchain-based digital payments platform. Typically, in the case of real-time payments, funds are transferred between two different institutions. With Signet, funds are transferred in real time between commercial clients of Signature Bank, eliminating any dependence on a third party. The Signet Platform was the first solution of its kind approved by the New York State Department of Financial Services, marking an important and groundbreaking industrywide banking advancement. Signature Bank partnered with trueDigital Holdings LLC, a New York blockchain-based infrastructure, exchange and settlement technology company providing solutions for traditional and emerging financial markets, to facilitate Signet's functionality.

Soon after introducing Signet, the Bank announced the platform was selected by an independent power supply company that provides retail and wholesale electric supply services throughout the U.S. They plan to use Signet to facilitate real-time payments within the renewable energy sector, signifying the first time this energy segment adopted a blockchain-based platform to conduct transactions involving the transfer of payments for power. Our relationship with the power supply company is just one example of many ecosystems and applications pertinent to the Signet Platform.

Furthermore, in 2018, capital management initiatives were introduced, aimed at increasing shareholder value. On July 18, 2018, Signature Bank declared its inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018, to our common shareholders of record at the close of business on August 1, 2018. Following the new dividend program, in October 2018, stockholders approved the repurchase of Common Stock from the Bank's shareholders in open market transactions in the aggregate purchase amount of up to $500.0 million. During the fourth quarter, the Bank repurchased 358,492 shares of Common Stock for a total of $41.8 million.

Lastly, during 2018, we continued to make noteworthy investments that will positively impact the Bank and its clients. These investments include those in our loan systems, payments architecture platform and new foreign exchange system. The advancements we are making to our systems are improving operations and enhancing functionality.

Our focus, initiatives and proven capabilities have differentiated this institution, while our vision and strong foundation have enabled preparedness for addressing various challenges presented in our path. Our strategic execution across all these notable initiatives continues to complement our core model and position the Bank for future growth.

## A Solid Year of Financial Performance

During 2018, we adapted to external market factors but stuck to our core principles. We are proud to have delivered another year of strong performance across all key metrics, based on our ability to continually execute, despite our first quarter reserve for our taxi medallion portfolio.

For the year ended December 31, 2018, net income rose 30.5 percent, or $118.1 million, to $505.3 million, or $9.23 diluted earnings per share, versus $387.2 million, or $7.12 diluted earnings per share, in 2017. The increase in net income for 2018 is mainly the result of growth in net interest income, fueled by strong average deposit and loan growth as well as a rise in prepayment penalty income. A decrease in the provision for loan losses also proved beneficial. All these factors were partially offset by an increase in non-interest expenses.

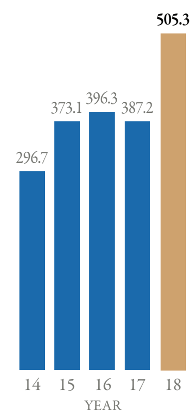
The Bank's loan portfolio expanded in 2018 by $3.81 billion, or 11.7 percent, to $36.42 billion, versus loans of $32.61 billion at the end of 2017. The 2018 loan increase is mostly attributable to growth in commercial and industrial loans, including specialty finance. Non-accrual loans at December 31, 2018 were $108.7 million, representing 0.30 percent of total loans and 0.23 percent of total assets, versus non-accrual loans of $326.9 million, or 1.00 percent of total loans, at December 31, 2017. Excluding non-accruing loans secured by taxi medallions of $88.5 million, non-accrual loans for the remainder of the portfolio are $20.1 million, or merely six basis points of total loans. At December 31, 2018, the ratio of allowance for loan and lease losses to total loans was 0.63 percent, versus 0.60 percent, at December 31, 2017.

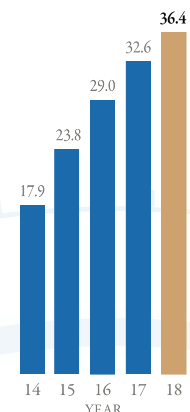
Our deposit growth demonstrates our strong leadership position as a depositor-focused institution. Overall deposit growth during 2018 was $2.94 billion, or 8.8 percent, with deposits reaching $36.38 billion at year end. Average total deposits in 2018 were $35.14 billion, growing $1.98 billion, or 6.0 percent, when compared with average total deposits of $33.16 billion for 2017. Additionally, non-interest-bearing deposits grew $663.2 million, or 5.8 percent. Our ability to grow non-interest-bearing deposits, which are mostly the operating accounts of our clients, demonstrates the strength of our franchise, especially given the difficult deposit environment we currently face.

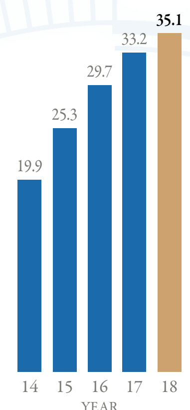
The Bank's capital position was once again strong in 2018. Our capital ratios were all well in excess of regulatory requirements. The Bank's Tier 1 leverage, common equity Tier 1 risk-based, Tier 1 risk-based and total risk-based capital ratios were 9.70 percent, 12.11 percent, 12.11 percent and 13.41 percent, respectively, as of December 31, 2018. The Bank's risk-based capital ratios continue to reflect the relatively low risk profile of our balance sheet. The tangible common equity ratio, which we define as the ratio of total tangible common shareholders' equity to total tangible assets, remained strong at 9.21 percent.

In 2018, our financial position and balance sheet remained extremely stable. We continue to increase loans as a percentage of the balance sheet and shift our commercial real estate concentration of the past to a commercial and industrial emphasis in the future.

With depositor safety and security our priority, Signature Bank earned high investment grade ratings again in 2018 for the fourth consecutive year from Kroll Bond Rating Agency (KBRA), a full-service rating agency. According to KBRA, Signature Bank's ratings were supported by our solid fundamentals, including a sustainable and strong earnings track record; the ability to remain profitable and deliver peer-leading returns, especially during economic downturns; disciplined underwriting practices; ongoing healthy liquidity; a deep core deposit base; consistently superior efficiency ratios; strong asset-quality metrics; sound capital ratios; and, a highly experienced management team. These exceptional ratings speak volumes to our declared pledge to our depositors.



## Built to Last

Throughout the nearly 18 years since our founding, we have closely and carefully listened to our clients. We have always strived to deliver unparalleled client care, along with a diverse product and service offering and advanced solutions, all of which result in an easy, seamless and cohesive banking experience.

Intently listening to our clients led to the development of Signet. We recognize how our crucial investments in technology today will impact our clients tomorrow.

We also are committed to serving the communities in which we operate. Some 2018 highlights of further deepening this commitment to the community include:

- Awarding Recoverable Grants totaling $500,000 to five community-based, not-for-profit housing developers and managers as part of the Signature Bank Building Improvement Initiative. This initiative is designed to provide needed capital to not-for-profit owner operators to facilitate and expedite improvements for tenants in their respective buildings. Each recipient received a $100,000 Recoverable Grant to make capital improvements to affordable housing properties in their portfolios;
- Further demonstrating our commitment to best practices for multi-family lending throughout New York City by creating a new community liaison specialist position to directly interface with community-based organizations and tenants;
- Offering investment workshops through the Bank's First Time Investors Program, which involves our own colleagues educating low-moderate income (LMI) individuals or veterans on money management and prudent ways of investing;
- Supporting education and youth through Signature Scholars, a customized college access and advising Signature Bank program for 80 LMI students in the Bronx and Stamford, Conn.; and,
- Strengthening our partnership with Cents Ability, a non-profit organization championing financial literacy, by training 20 Signature Bank colleagues who now volunteer to teach financial literacy to New York City LMI high school students.

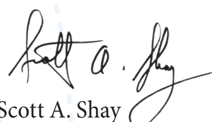
Our client focus and community initiatives resulted in many accolades during 2018:

- Signature Bank was named the Best Business Bank, Best Private Bank and Best Attorney Escrow Services provider by the *New York Law Journal* in its ninth annual "Best of" survey of the New York legal community. 2018 also marks the ninth straight year the Bank earned a top three position in one or more of these same categories, earning it a place in the *New York Law Journal's* Hall of Fame. The Hall of Fame is awarded only to companies that have placed in "Best of" for at least three of the past four years;
- Nationally, Signature Bank ranked second in the Best Business Bank, Best Private Banking Services and Best Attorney Escrow Services categories of *National Law Journal's* "Best of" 2019 survey, based on votes cast in 2018 by the legal community throughout the country. To be nationally recognized in the company of trillion-dollar megabanks is an absolutely amazing honor; and,
- Signature Bank was named among the Best Banks in America for the eighth consecutive year by *Forbes* in 2018.

As we close 2018 and look ahead, we reflect on the positive influence all constituents engaged in our business have had on Signature Bank's leadership position, making our vision and notable success possible. First, we extend our deepest thanks to our 1,400+ colleagues for their devotion to our clients. Our colleagues make our reputation as a leading commercial bank. We are grateful for our growing client base and their loyalty, our Board of Directors for its ongoing guidance, and our shareholders for their faith in our growing institution.

As the economy, technology and banking landscape continue to rapidly change, Signature Bank is playing a key role in shaping the future of the industry. We are determined to continue to remain a leading force in the commercial banking landscape. Maintaining our founding principles and vision while adapting to the evolving landscape enforces our pledge to ensure financial strength, depositor safety, unequaled relationship-based banking and consistent shareholder value.

Respectfully,



Scott A. Shay
Chairman of the Board

Joseph J. DePaolo
President and
Chief Executive Officer

# UNITED STATES
# 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, 2018**

**Or**

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

**For the transition period from to**

**FDIC Certificate Number 57053**

# SIGNATURE BANK

(Exact name of registrant as specified in its charter)

| **NEW YORK** | **13-4149421** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **565 Fifth Avenue, New York, New York** | **10017** |
| (Address of principal executive offices) | (Zip Code) |

Registrant's telephone number, including area code: **(646) 822-1500**

**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 | NASDAQ Global Select Market |

**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 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). 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 an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b 2 of the Exchange Act. (Check one):

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant, based on the closing sales price of the registrant's Common Stock as quoted on the NASDAQ Global Select Market on June 30, 2018 was $6.92 billion.

As of February 28, 2019, the Registrant had outstanding 55,095,822 shares of Common Stock.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive Proxy Statement for Annual Meeting of Stockholders to be held April 18, 2019. (Part III)

**SIGNATURE BANK**
**ANNUAL REPORT ON FORM 10-K**
**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018**

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## PRIVATE SECURITIES LITIGATION REFORM ACT SAFE HARBOR STATEMENT

This Annual Report on Form 10-K and oral statements made from time to time by our representatives contain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties. You should not place undue reliance on such statements because they are subject to numerous risks and uncertainties relating to our operations and the business environment in which we operate, all of which are difficult to predict and many of which are beyond our control. Forward-looking statements include information concerning our possible or assumed future results of operations, including descriptions of our business strategy, expectations, beliefs, projections, anticipated events or trends, growth prospects, financial performance, and similar expressions concerning matters that are not historical facts. These statements often include words such as “may,” “believe,” “expect,” “anticipate,” “potential,” “opportunity,” “intend,” “plan,” “estimate,” “could,” “project,” “seek,” “should,” “will,” or “would,” or the negative of these words and phrases or similar words and phrases.

All forward-looking statements may be impacted by a number of risks and uncertainties. These statements are based on assumptions that we have made in light of our industry experience as well as our perception of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances including, without limitation, those related to:

- earnings growth;
- revenue growth;
- net interest margin;
- deposit growth, including short-term escrow deposits, brokered deposits and off-balance sheet deposits;
- future acquisitions;
- performance, credit quality and liquidity of investments made by us, including our investments in certain mortgage-backed and similar securities;
- loan and lease origination volume;
- the interest rate environment;
- non-interest income levels, including fees from product sales;
- credit performance of loans made by us;
- monetary and fiscal policies of the U.S. Government, including policies of the U.S. Treasury and the Board of Governors of the Federal Reserve System;
- our ability to maintain, generate and/or raise capital;
- changes in the regulatory environment and government intervention in the banking industry, including the impact of the Dodd-Frank Wall Street Reform, and the Economic Growth, Regulatory Relief and Consumer Protection Act,
- Federal Deposit Insurance Corporation insurance assessments;
- margins on sales or securitizations of loans;
- market share;
- expense levels;
- hiring of new private client banking teams;

- results from new business initiatives;
- future dividends and share repurchases;
- other business operations and strategies;
- changes in federal, state or local tax laws; and
- the impact of new accounting pronouncements.

As you read and consider the forward-looking statements, you should understand that these statements are not guarantees of performance or results. They involve risks, uncertainties and assumptions and can change as a result of many possible events or factors, not all of which are known to us or in our control. Although we believe that these forward-looking statements are based on reasonable assumptions, beliefs and expectations, if a change occurs or our beliefs, assumptions or expectations were incorrect, our business, financial condition, liquidity or results of operations may vary materially from those expressed in our forward-looking statements. You should be aware that many factors could affect our actual financial results or results of operations and could cause actual results to differ materially from those in the forward-looking statements. See "Part I, Item 1A. – Risk Factors" for a discussion of the most significant risks that we face, including, without limitation, the following factors:

- disruption and volatility in global financial markets;
- difficult market conditions adversely affecting our industry;
- fiscal challenges facing the U.S. government could negatively impact financial markets which in turn could have an adverse effect on our financial position or results of operations;
- our inability to successfully implement our business strategy;
- our inability to successfully integrate new business lines into our existing operations;
- changes to existing statutes and regulations or the way in which they are interpreted and applied by courts or governmental agencies;
- our vulnerability to changes in interest rates;
- the planned phase out of LIBOR as a financial benchmark presents risks to the financial instruments originated or held by us;
- competition with many larger financial institutions which have substantially greater financial and other resources than we have;
- government intervention in the banking industry, new legislation and government regulation;
- illiquid market conditions and downgrades in credit ratings;
- adverse developments in the residential mortgage market;
- inability of U.S. agencies or U.S. government-sponsored enterprises to pay or to guarantee payments on their securities in which we invest;
- material risks involved in commercial lending;
- a downturn in the economy and the real estate market of the New York metropolitan area;

- risks associated with our loan portfolio growth;
- our failure to effectively manage our credit risk;
- lack of seasoning of mortgage loans underlying our investment portfolio;
- our allowance for loan and lease losses ("ALLL") may not be sufficient to absorb actual losses;
- our reliance on the Federal Home Loan Bank of New York for secondary and contingent liquidity sources;
- our dependence upon key personnel;
- our inability to acquire suitable private client banking teams or manage our growth;
- our charter documents and regulatory limitations may delay or prevent our acquisition by a third party;
- curtailment of government guaranteed loan programs could affect our SBA business;
- our use of brokered deposits and continuing to be "well-capitalized";
- our extensive reliance on outsourcing to provide cost-effective operational support;
- system failures or breaches of our network security;
- data security breaches;
- decreases in trading volumes or prices;
- exposure to legal claims and litigation;
- our ability to pay cash dividends or engage in share repurchases is restricted;
- potential responsibility for environmental claims;
- climate change and related legislative and regulatory initiatives may result in operational changes and expenditures that could significantly impact our business;
- downgrades of our credit rating;
- our inability to raise additional funding needed for our operations;
- inflation or deflation;
- misconduct of employees or their failure to abide by regulatory requirements;
- fraudulent or negligent acts on the part of our clients or third parties;
- failure of our brokerage clients to meet their margin requirements;
- severe weather;
- acts of war or terrorism;
- technological changes;

- work stoppages, financial difficulties, fire, earthquakes, flooding or other natural disasters;
- changes in federal, state or local tax laws;
- changes in accounting standards, policies, and practices or interpretation of new or existing standards, policies and practices, as may be adopted by the bank regulatory agencies, the Financial Accounting Standards Board, or the Securities and Exchange Commission (the "SEC");
- changes in our reputation and negative public opinion;
- increases in FDIC insurance premiums;
- regulatory net capital requirements that constrain our brokerage business;
- soundness of other financial institutions;
- our ability to enter new markets successfully and capitalize on growth opportunities;
- changes in consumer spending, borrowing and savings habits;
- changes in our organization, compensation and benefit plans; and
- changes in the financial condition or future prospects of issuers of securities that we own.

See "Part I, Item 1A.– Risk Factors" for a full discussion of these risks.

You should keep in mind that any forward-looking statement made by us speaks only as of the date on which we make it. New risks and uncertainties arise from time to time, and it is impossible for us to predict these events or how they may affect us. We have no duty to, and do not intend to, and disclaim any obligation to, update or revise any industry information or forward-looking statements after the date on which they are made. In light of these risks and uncertainties, you should keep in mind that any forward-looking statement made in this document or elsewhere might not reflect actual results.

## PART I

## ITEM 1. BUSINESS

In this annual report filed on Form 10-K, except where the context otherwise requires, the "Bank," the "Company," "Signature," "we," "us," and "our" refer to Signature Bank and its subsidiaries, including Signature Financial, LLC ("Signature Financial"), Signature Securities Group Corporation ("Signature Securities") and Signature Public Funding Corporation ("Signature Public Funding").

### Introduction

We are a New York-based full-service commercial bank with 30 private client offices located in the New York metropolitan area, offering a wide variety of business and personal banking products and services. In 2018, the Bank expanded its footprint on the West Coast with the opening of its first full-service private client banking office in San Francisco. The Bank's growing network of private client banking teams serves the needs of privately owned businesses, their owners and their senior managers.

Through our Signature Financial subsidiary, a specialty finance company based in Melville, Long Island, we offer a variety of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, and national franchise financing and/or leasing. Signature Financial's clients are located throughout the United States.

We provide brokerage, asset management and insurance products and services through our Signature Securities subsidiary, a licensed broker-dealer and investment adviser.

Through our Signature Public Funding subsidiary based in Towson, Maryland, we provide a range of municipal finance and tax-exempt lending and leasing products to government entities throughout the country, including state and local governments, school districts, fire and police and other municipal entities. The subsidiary is overseen by the management team of Signature Financial who has extensive experience in municipal finance.

Additionally, through a representative office of the Bank in Houston, Texas, we purchase, securitize and sell the guaranteed portions of U.S. Small Business Administration ("SBA") loans.

Since commencing operations in May 2001, we have grown to $47.36 billion in assets, $36.38 billion in deposits, $36.42 billion in loans, $4.41 billion in equity capital and $3.78 billion in other assets under management as of December 31, 2018. We intend to continue our growth and maintain our position as a premier relationship-based financial services organization in the New York metropolitan area and on the West Coast as guided by our Chairman and senior management team who have extensive experience developing, managing and growing financial service organizations.

Signature Bank's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports, Proxy Statement for its Annual Meeting of Stockholders and Annual Report to Stockholders are made available, free of charge, on our website at *www.signatureny.com* as soon as reasonably practicable after such reports have been filed with or furnished to the Federal Deposit Insurance Corporation ("FDIC"). You may also obtain any materials that we file with the FDIC at the Federal Deposit Insurance Corporation's offices located at 550 17th Street N.W., Washington, DC 20429.

### Recent Highlights

#### *Signet*™

On January 1, 2019, the Bank launched Signet™, a new proprietary digital payments platform, allowing our commercial clients to transact in a real-time and transparent manner. Signet leverages blockchain technology in its architecture, allowing Signature Bank's commercial clients to make payments to other Signature commercial clients in U.S. dollars 24 hours a day, seven days a week, 365 days a year.

***Establishment of New Fund Banking Division***

In October 2018, the Bank launched its new Fund Banking Division which is based in Midtown Manhattan. The division is dedicated to providing financing and banking services to the private equity industry by offering subscription lines of credit, management company lines of credit and general partner loans, specifically targeted to private equity firms and their general partners.

***Stock Repurchase Program***

On October 17, 2018, the Bank's stockholders approved the repurchase of common stock from the Bank's shareholders in open market transactions in the aggregate purchase amount of up to $500.0 million. The timing of the execution of this plan, as well as the amount repurchased, will be at the discretion of our Board of Directors and management, and will be dependent upon then-existing conditions, including our financial condition and results of operations, capital requirements, commercial real estate concentration, contractual restrictions, business prospects and other factors considered relevant. Share buybacks are also subject to shareholder and regulatory approval, which were received for the repurchase program of up to $500.0 million in October and November 2018, respectively. During the fourth quarter of 2018, the Bank repurchased 358,492 shares of common stock for a total of $41.8 million.

***Common Stock Dividend***

On July 18, 2018, the Bank declared its inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018 to our common shareholders of record at the close of business on August 1, 2018. The Bank declared its second cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on November 15, 2018 to common shareholders of record at the close of business on November 1, 2018. On January 17, 2019, the Bank declared its third cash dividend of $0.56 per share, or a total of $30.8 million, which was paid on February 15, 2019 to common shareholders of record at the close of business on February 1, 2019.

Any future determination to pay dividends will be at the discretion of our Board of Directors and will be dependent upon then-existing conditions, including our financial condition and results of operations, capital requirements, contractual restrictions, business prospects and other factors that the Board of Directors considers relevant.

***Core Deposit Growth***

During 2018, our deposits grew $2.94 billion, or 8.8 %, to $36.38 billion. Deposits at December 31, 2018 included $2.21 billion of time deposits compared to $1.80 billion at year-end 2017. Core deposits, which exclude time deposits and brokered deposits, increased $2.53 billion, or 8.0%, during 2018 as a result of the addition of new private client banking teams, who assist us in growing our client base, as well as additional deposits raised by our existing private client banking teams. We primarily focus our deposit gathering efforts in the greater New York metropolitan area market with money center banks, regional banks and community banks as our primary competitors. We distinguish ourselves from competitors by focusing on our target market: privately owned businesses, their owners and their senior managers, as well as private equity firms and their general partners. This niche approach, coupled with our relationship-banking model, provides our clients with a personalized service, which we believe gives us a competitive advantage. Our deposit mix has remained favorable, with non-interest-bearing and NOW deposits accounting for 45.1% of our total deposits and time deposits accounting for 5.5% of our total deposits as of December 31, 2018. Our average cost for total deposits was 0.82% for the year ended December 31, 2018.

***Strategic Hires***

During 2018, we increased our network of seasoned banking professionals by adding nine private client banking teams and several new banking group directors, including the addition of the aforementioned Fund Banking Division. Our full-time equivalent number of employees grew from 1,305 to 1,393 during 2018.

***Private Client Banking Teams and Offices***

As of December 31, 2018, we had 102 private client banking teams located throughout the New York metropolitan area and on the West Coast. With the on-going consolidation of financial institutions in our marketplace and market segmentation by our competitors, we continue to actively recruit experienced private client banking teams with established client relationships that fit our niche market of privately owned businesses, their owners and their senior managers. Our typical group director joins us with 20 years of experience in financial services and an established team of two to four additional professionals to assist with business development and client services. Each additional private client banking team brings client relationships that allow us to grow our core deposits as well as expand our lending opportunities.

We currently operate 30 private client offices in the New York metropolitan area. In 2018, the Bank expanded its footprint on the West Coast with the opening of its first full-service private client banking office in San Francisco. While our strategy does not call for us to have an expansive office presence, we will continue to add offices to meet the needs of the private client banking teams that we recruit. As such, we expect to continue to expand our geographic presence on the West Coast where we have significant client synergies.

**Our Business Strategy**

We intend to increase our presence as a premier relationship-based financial services organization serving the needs of privately owned business clients, their owners and their senior managers in major metropolitan areas by continuing to:

***Focus on our niche market of privately owned businesses, their owners and their senior managers***

We generally target closely held commercial clients with revenues of less than $200 million and fewer than 1,000 employees. Our business clients are principally representative of the New York metropolitan area economy and include real estate owners/operators, real estate management companies, law firms, accounting firms, entertainment business managers, medical professionals, retail establishments, money management firms and not-for-profit philanthropic organizations. We also target the owners and senior management of these businesses who typically have a net worth of between $500,000 and $20 million. Additionally, the newly launched Fund Banking division will be dedicated to providing financing and banking services to the private equity industry by offering subscription lines of credit, management company lines of credit and general partner loans, specifically targeted to private equity firms and their general partners.

***Provide our clients a wide array of high quality banking, brokerage and insurance products and services through our private client group structure and a seamless financial services solution***

We offer a broad array of financial products and services with a seamless financial services solution through our private client banking team structure.

Most of our competitors that sell banking products as well as investment and insurance products do so based on a “silo” approach. In this approach, different sales people from different profit centers within the bank, brokerage firm or insurance company separately offer their particular products to the client. This approach creates client confusion as to who is servicing the relationship. Because no single relationship manager considers all of the needs of a client in the “silo” approach, some products and services may not be presented at all to the client. We market our banking, investment and insurance services seamlessly, thus avoiding the “silo” approach of many of our competitors in the major metropolitan areas we serve in New York, as well as along the West Coast. Our cash management, investment and insurance products and services are presented to clients by the private client banking team professional but provided or underwritten by others.

Our business is built around banking and investment private client groups. We believe that our ability to hire and retain top-performing relationship group directors is our major competitive advantage. Our group directors have primary responsibility for attracting client relationships and, on an on-going basis, through them and their groups, servicing those relationships. Our group directors are experienced financial service professionals who come from the following disciplines: private banking, middle market banking, high-end retail banking, investment and insurance and institutional brokerage. Our group directors each have their own private client banking team (typically two to four professionals) who assists the group director in business development and client service.

***Recruit experienced, talented and motivated private client group directors who are top producers and who believe in our banking model***

A key to our success in developing a relationship-based bank is our ability to recruit and retain experienced and motivated financial services professionals. We recruit group directors and private client banking teams who we believe are top performers. While recruitment channels differ and our recruitment efforts are largely opportunistic in nature, the continuing merger and acquisition activity in the New York and West Coast financial services marketplaces provides an opportunity to selectively target and recruit qualified teams. We believe the current market to be a favorable environment for locating and recruiting qualified private client banking teams. Our experience has been that such displacement and change leads select private client banking teams to smaller, less bureaucratic organizations such as Signature.

***Offer incentive-based compensation that rewards private client banking teams for developing their business and retaining their clients***

Our private client banking team variable compensation model adds to the foundation for our relationship-based banking discipline. A key part of our strategy for growing our business is the incentive-based compensation that we employ to help us retain our group directors while ensuring that they continue to develop their business and retain their clients. Under our private client banking team variable compensation model, annual bonuses are paid to members of the team based upon the profit generated from their business. In order to mitigate the inherent risk in our incentive-based compensation model, we have in place an internal control structure that includes segregation of duties and risk management review of compensation practices. For example, the underwriting and ultimate approval of any loan is performed by loan officers who are separate from the private client banking teams and report to our Chief Credit Officer and Chief Lending Officer.

Because we are a relationship-based commercial bank, we compensate our employees for average balances, not for the number of accounts or products. Incentive revenue is the same for both retaining and obtaining clients. Additionally, there are no sales competitions or sales requirements, nor are there any cross-selling requirements.

***Maintain a flat organization structure for business development purposes that provides our clients and group directors with direct access to senior management***

Another key element of our strategy is our organizational structure. We operate with a flat organizational and reporting structure, through which our group directors report directly to senior management. More importantly, it gives our clients direct access to senior management.

***Develop and maintain operations support that is client-centric and service oriented***

We have made a significant investment in our infrastructure, including our support staff. Although we have centralized many of our critical operations, such as finance, information technology, client services, cash management services, loan administration and human resources, we have located some functions within the private client offices so they are closer to the group directors and our clients. For example, most of our private client offices have a senior lender on location, who is part of our credit group, to assist the private client banking teams with the lending process. In addition, most of our private client offices have an investment group director or team that provides brokerage and/or insurance services, as necessary. We believe our existing infrastructure (physical and systems infrastructure, as well as people) can accommodate additional growth without substantial additional support area personnel or significant spending on technology and operations in the medium term.

***Be committed to a sound risk management process while focusing on profitability***

Risk management is an important element of our business. We evaluate the inherent risks that affect our business, including interest rate risk, credit risk, operational risk, regulatory risk, and reputation risk. We have a Chief Risk Officer whose responsibility is the oversight of our risk management processes. Additionally, members of our senior management group have significant experience in risk management, credit, operations, finance and auditing. We have put internal controls in place that help to mitigate the risks that affect our business. In addition, we have policies and procedures that further help mitigate risk and regulatory requirements that mandate that we evaluate, test and opine on the effectiveness of internal controls. No system of internal control or policies and procedures will ever totally eliminate risk. However, we believe that our risk management processes will help keep our risks to a manageable level.

***Maintain an appropriate balance between cost control, incentive compensation and business expansion initiatives***

We have established an internal approval process for capital and operating expenses. We maintain cost control practices and policies to increase efficiency of operations. A key expense for financial service companies is compensation. Controlling this expense is an important element in keeping overall expenses down. Our group directors and their teams receive base salaries and benefits; however, a significant portion of their compensation is variable and based upon the profit generated from the business they create. This variable compensation model helps us control expenses as employees do not receive variable compensation unless revenue is generated. Virtually all expenditures (both current and capital) in excess of certain thresholds must be approved by a member of senior management and are reviewed and approved by our Purchasing and Capital Expenditures Committee, which includes our Chief Operating Officer and our Chief Financial Officer.

We make extensive use of outsourcing to provide cost-effective operational support with service levels consistent with large-bank operations. We focus on our financial services business and have outsourced many of our key banking and brokerage systems to third-party providers. This has several advantages for an institution like ours, including the ability to cost-effectively utilize the latest technology to better serve, and stay focused on, the needs of our clients. Our key outsourcing partners include Fidelity Information Services and National Financial Services (the brokerage and investments systems division of Fidelity Investments). We maintain management oversight of these providers. Each of these providers was the subject of a due diligence investigation prior to their selection and continues to be reviewed on an on-going basis by Vendor Management.

**Historical Development**

We were incorporated as a New York State-chartered bank in September 2000. On April 5, 2001, our date of inception, we received approval to commence operations from the New York State Banking Department (known as the New York State Department of Financial Services as of October 3, 2011). Since commencing operations on May 1, 2001, the following subsequent historical developments have occurred in relation to our ownership and capital structure:

- We completed our initial public offering in March 2004 and a follow-on offering in September 2004. Our common stock trades on the Nasdaq Global Select Market under the symbol “SBNY.”
- In March 2005, Bank Hapoalim B.M. sold its controlling stake in us in a secondary offering. After the offering, Bank Hapoalim beneficially owned 5.7% of our common stock on a fully diluted basis. Bank Hapoalim no longer owns any shares of our stock.
- In September 2008, we completed a public offering of 5,400,000 shares of our common stock generating net proceeds of $148.1 million.
- In December 2008, we issued 120,000 shares of senior preferred stock (with an aggregate liquidation preference of $120.0 million) and a warrant to purchase 595,829 common shares to the U.S. Treasury in the Troubled Asset Relief Program Capital Purchase Program (the “TARP Capital Purchase Program”), for an aggregate purchase price of $120.0 million.
- In light of the restrictions of the American Recovery and Reinvestment Act of 2009, on March 31, 2009, we repurchased the 120,000 shares of preferred stock we issued to the U.S. Treasury for $120.0 million plus accrued and unpaid dividends of $767,000.
- In June 2009, we completed a public offering of 5,175,000 shares of our common stock generating net proceeds of $127.3 million.
- In March 2010, the U.S. Treasury sold, in a public offering, a warrant to purchase 595,829 shares of our common stock that was received from us in the TARP Capital Purchase Program. All warrants were either exercised or expired as of the December 12, 2018 expiration date.
- In July 2011, we completed a public offering of 4,715,000 shares of our common stock generating net proceeds of $253.3 million.
- In July 2014, we completed a public offering of 2,415,000 shares of our common stock generating net proceeds of $295.8 million.

- In February 2016, we completed a public offering of 2,366,855 shares of our common stock generating net proceeds of $318.7 million.
- In April 2016, the Bank issued $260.0 million of subordinated debt to institutional investors.
- On August 15, 2018, the Bank paid its inaugural quarterly cash dividend to common shareholders.
- On October 17, 2018, the Bank's stockholders approved the repurchase of common stock from the Bank's shareholders in open market transactions in the aggregate purchase amount of up to $500.0 million. As of December 31, 2018, the Bank repurchased 358,492 shares of common stock for a total of $41.8 million.

***Products and Services***

***Business Clients***

We offer a full range of products and services oriented to the needs of our business clients, including:

- Deposit products such as non-interest-bearing checking accounts, money market accounts, and time deposits;
- Escrow deposit services;
- Cash management services;
- Commercial loans and lines of credit for working capital and to finance internal growth, acquisitions and leveraged buyouts;
- Subscription lines of credit, management company lines of credit and general partner loans, specifically targeted to private equity firms and their general partners;
- Equipment finance and leasing products, including equipment transportation, taxi medallion, commercial marine, and national franchise financing and/or leasing;
- Municipal finance and tax-exempt lending and leasing products to government entities;
- Asset-based lending;
- Permanent real estate loans;
- Letters of credit;
- Investment products to help better manage idle cash balances, including money market mutual funds and short-term money market instruments;
- Business retirement accounts such as 401(k) plans;
- Business insurance products, including group health and group life products; and
- Signet – digital payments platform, which leverages blockchain technology, allowing our commercial clients to transact in real-time and transparent manner.

***Personal Clients***

We offer a full range of products and services oriented to the needs of our high net worth personal clients, including:

- Interest-bearing and non-interest-bearing checking accounts, with optional features such as debit/ATM cards and overdraft protection and, for our top clients, rebates of certain charges, including ATM fees;
- Money market accounts and money market mutual funds;
- Time deposits;
- Personal loans, both secured and unsecured;
- Credit card accounts;
- Investment and asset management services; and
- Personal insurance products, including health, life and disability.

***Deposit Products***

The market for deposits continues to be very competitive. We primarily focus our deposit gathering efforts in the greater New York metropolitan area market with money center banks, regional banks and community banks as our primary competitors. In 2018, we expanded our deposit gathering efforts to the West Coast with the opening of our first full-service private client banking office in San Francisco. We distinguish ourselves from competitors by focusing on our target market: privately owned businesses, their owners and their senior managers as well as private equity firms and their general partners. This niche approach, coupled with our relationship-banking model, provides our clients with a personalized service, which we believe gives us a competitive advantage.

We offer a variety of deposit products to our clients at interest rates competitive with other banks. Our business deposit products include commercial checking accounts, money market accounts, escrow deposit accounts, cash concentration accounts and other cash management products. Our personal deposit products include checking accounts, money market accounts and certificates of deposit. We also allow our personal and business deposit clients to access their accounts, transfer funds, pay bills and perform other account functions over the internet and through automated teller machines.

The following table presents the composition of our deposit accounts as of the dates indicated:

| | *December 31,* | | | |
|---|---|---|---|---|
| | *2018* | | *2017* | |
| *(dollars in thousands)* | **Amount** | **Percentage** | **Amount** | **Percentage** |
| Personal demand deposit accounts (1) | $ 861,292 | 2.37% | 908,543 | 2.72% |
| Business demand deposit accounts (1) | 11,154,549 | 30.65% | 10,399,871 | 31.10% |
| Brokered demand deposit accounts (1) | 26 | 0.00% | 44,624 | 0.13% |
| Personal NOW | 35,289 | 0.10% | 56,748 | 0.17% |
| Business NOW | 4,360,261 | 11.99% | 3,598,951 | 10.76% |
| Brokered NOW | 2,215 | 0.01% | - | 0.00% |
| Rent security | 283,941 | 0.78% | 231,192 | 0.69% |
| Personal money market accounts | 3,669,637 | 10.09% | 4,091,155 | 12.23% |
| Business money market accounts | 13,887,703 | 38.17% | 12,353,360 | 36.95% |
| Brokered money market accounts | 126,559 | 0.35% | 175,028 | 0.52% |
| Personal time deposits | 271,194 | 0.75% | 274,165 | 0.82% |
| Business time deposits | 1,106,323 | 3.04% | 682,253 | 2.04% |
| Brokered time deposits | 619,784 | 1.70% | 623,937 | 1.87% |
| Total | $ 36,378,773 | 100.00% | 33,439,827 | 100.00% |
| Demand deposit accounts (1) | $ 12,015,841 | 33.02% | 11,308,414 | 33.82% |
| NOW | 4,395,550 | 12.09% | 3,655,699 | 10.93% |
| Money market accounts | 17,841,281 | 49.04% | 16,675,707 | 49.87% |
| Time deposits | 1,377,517 | 3.79% | 956,418 | 2.86% |
| Brokered deposits (2) | 748,584 | 2.06% | 843,589 | 2.52% |
| Total | $ 36,378,773 | 100.00% | 33,439,827 | 100.00% |
| Personal | $ 4,837,412 | 13.31% | 5,330,611 | 15.94% |
| Business | 30,792,777 | 84.63% | 27,265,627 | 81.54% |
| Brokered deposits (2) | 748,584 | 2.06% | 843,589 | 2.52% |
| Total | $ 36,378,773 | 100.00% | 33,439,827 | 100.00% |

(1) Non-interest bearing.

(2) Includes non-interest bearing deposits of $26,000 and $44.6 million as of December 31, 2018 and December 31, 2017, respectively.

### *Lending Activities*

Our traditional commercial and industrial ("C&I") lending is generally limited to existing clients with whom we have or expect to have deposit and/or brokerage relationships in order to assist in monitoring and controlling credit risk. We target our lending to privately owned businesses, their owners and their senior managers, generally high net worth individuals who meet our credit standards. In 2018, we further expanded this target market to include private equity firms and their general partners with the establishment of our new Fund Banking Division. Our credit standards are set by the Credit Committee of our Board of Directors (the "Credit Committee") with the assistance of our Chief Credit Officer and Chief Lending Officer, who is charged with ensuring that credit standards are met by loans in our portfolio. In addition, we have a credit authorization policy under which no single individual is authorized to approve a loan regardless of dollar amount. Smaller loans may be approved by concurring authorized officers. Larger loans require the approval of the Credit Committee. Our largest loan category requires the approval of our Board of Directors. Our credit standards for commercial borrowers reference numerous criteria with respect to the borrower, including historical and projected financial information, the strength of management, acceptable collateral and associated advance rates, and market conditions and trends in the borrower's industry. In addition, prospective loans are analyzed based on current industry concentrations in our loan portfolio to prevent an unacceptable concentration of loans in any particular industry. We believe our credit standards are similar to the standards generally employed by large nationwide banks in the markets we serve. We seek to differentiate ourselves from our competitors by focusing on and aggressively marketing to our core clients and accommodating, to the extent permitted by our credit standards, their individual needs. We generally limit unsecured lending for consumer loans to private banking clients who we believe demonstrate ample net worth, liquidity and repayment capacity.

We make loans that are appropriately collateralized under our credit standards. Approximately 98% of our funded loans are secured by collateral. Unsecured loans are typically made to individuals with substantial net worth.

*Commercial and Industrial Loans*

Our C&I loan portfolio is comprised of lines of credit for working capital and term loans to finance equipment and other business assets, along with commercial overdrafts. Our lines of credit for working capital are generally renewed on an annual basis and our term loans generally have terms of two to five years. C&I loans can be subject to risk factors unique to the business of each client. In order to mitigate these risks and better serve our clients, we seek to gain an understanding of the business of each client and the reliability of their cash flow, so that we can place appropriate value on collateral taken and structure the loan to maintain collateral values at appropriate levels. In analyzing credit risk, we generally focus on the business experience of our borrowers' management. We prefer to lend to borrowers with an established track record of loan repayment and predictable growth and cash flow. We also rely on the experience of our bankers and their relationships with our clients to aid our understanding of the client and its business. Our lines of credit typically are limited to a percentage of the value of the assets securing the line. Lines of credit are generally reviewed annually and are typically supported by accounts receivable, inventory and equipment. Depending on the risk profile of the borrower, we may require periodic aging of receivables, as well as borrowing base certificates representing current levels of inventory, equipment, and accounts receivable. Our term loans are typically also secured by the assets of our clients' businesses. Commercial borrowers are required to provide updated personal and corporate financial statements at least annually. Our Fund Banking Division also provides subscription lines of credit, management company lines of credit and general partner loans, specifically targeted to private equity firms and their general partners.

At December 31, 2018, funded C&I loans totaled approximately 22% of our total funded loans. Loans extended to borrowers within the services industries include loans to finance working capital and equipment, as well as loans to finance investment and owner-occupied real estate.

The following table presents information regarding the distribution of our C&I loans among the various industries we had concentration in as of December 31, 2018:

**Industry Classifications**

| *(dollars in thousands)* | | Loan Amount | Percentage |
|---|---|---|---|
| Financial Services | $ | 1,522,684 | 19.04% |
| Transportation Services | | 1,112,958 | 13.92% |
| Building and Construction Contractors | | 738,217 | 9.23% |
| Real Estate and Real Estate Management | | 734,114 | 9.18% |
| Manufacturing | | 722,749 | 9.04% |
| Automotive Services | | 450,491 | 5.64% |
| Accomodation and Food Services | | 403,036 | 5.04% |
| Professional Services | | 398,504 | 4.99% |
| Wholesale Trade | | 384,543 | 4.81% |
| Health Services | | 288,089 | 3.60% |
| Public Administration | | 235,090 | 2.94% |
| Retail Trade | | 217,061 | 2.72% |
| Audio/Video Services | | 188,369 | 2.36% |
| Educational Services | | 183,032 | 2.29% |
| Business Services | | 90,037 | 1.13% |
| Taxi Medallions | | 88,511 | 1.11% |
| Mining | | 67,396 | 0.84% |
| Recreational Services | | 55,791 | 0.70% |
| Private Households | | 51,715 | 0.65% |
| Utilities | | 37,805 | 0.47% |
| Agriculture | | 23,807 | 0.30% |
| Total | $ | 7,993,999 | 100.00% |

As of December 31, 2018, one component of our C&I portfolio consisted of loans to finance taxi medallions, which are the licenses required to operate taxicabs. We conduct most of this business in New York City, which is a well-regulated market. The increased competition from Transportation Network Companies within the taxi industry and the significant decline in the underlying New York City taxi medallion collateral value in 2017 caused substantial doubt regarding the collectability of these loans. As a result, in 2017, we placed the entire taxi medallion portfolio on nonaccrual and recorded significant charge-offs within the New York City taxi medallion portfolio. In the first quarter of 2018, a further significant decline in the underlying collateral fair value was observed resulting in additional charge-offs. The charge-off activity combined with the application of all principal and interest payments to the nonaccrual loan principal balance reduced our exposure to $88.5 million (or 1.11%) of our C&I loans at December 31, 2018, as compared to $309.9 million (or 4.86%) at December 31, 2017. See the discussion of asset quality and the ALLL later in this report, as well as in Note 8 to our Consolidated Financial Statements.

*Real Estate Loans*

Our real estate loan portfolio includes loans secured by commercial property, multi-family residential property, 1-4 family residential property, and acquisition, development and construction. We also provide temporary financing for commercial and residential property. Our permanent real estate loans generally have terms of up to ten years. We generally avoid longer term loans for commercial real estate held for investment. Our permanent real estate loans have both floating and fixed rates. Depending on the financial status of the borrower, we may require periodic appraisals of the property to verify the ongoing adequacy of the collateral. At December 31, 2018, funded real estate loans totaled approximately $29.50 billion, representing approximately 80% of our total funded loans.

The following table shows the distribution of our real estate loans by collateral type as of December 31, 2018:

**Loans Secured by Real Estate**

| | December 31, 2018 | |
|---|---|---|
| *(dollars in thousands)* | **Loan Amount** | **Percentage** |
| Multi-family residential property | $ 15,688,481 | 53.19% |
| Commercial property | 11,415,082 | 38.70% |
| 1-4 family residential property | 620,486 | 2.10% |
| Home equity lines of credit | 116,272 | 0.39% |
| Acquisition, development and construction loans | 1,656,467 | 5.62% |
| Total | $ 29,496,788 | 100.00% |

Personal residential real estate loans, or first and second mortgage loans for residential properties, are not a core part of our business. Historically, we originated these loans to borrowers who were typically high net worth individuals from our private client services. However, effective January 2016, we no longer originate these loans, though we expect to continue to service the remaining portfolio until maturity.

Substantially all of the real estate collateral for the loans in our portfolio is located within the New York metropolitan area. As a result, our financial condition and results of operations may be affected by changes in the economy and the real estate market of the New York metropolitan area. A prolonged period of economic recession or other adverse economic conditions in the New York metropolitan area may result in an increase in nonpayment of loans, a decrease in collateral value, and an increase in our ALLL.

*Letters of Credit*

We issue standby or performance letters of credit, and can service the international needs of our clients through correspondent banks. At December 31, 2018, our commitments under letters of credit totaled approximately $484.9 million.

*Consumer Loans*

Our personal loan portfolio consists of personal lines of credit and loans to acquire personal assets. Our personal lines of credit generally have terms of one year and our term loans usually have terms of three to five years. Our lines of credit typically have floating interest rates. If the financial situation of the client is sufficient, we will grant unsecured lines of credit. We also examine the personal liquidity of our individual borrowers, in some cases requiring agreements to maintain a minimum level of liquidity, to ensure that the borrower has sufficient liquidity to repay the loan. At December 31, 2018, our consumer loans totaled $9.0 million, representing less than 0.1% of our total funded loans.

### ***Investment and Asset Management Products and Services***

Investment and asset management products and services are provided through our subsidiary, Signature Securities. Signature Securities is a licensed broker-dealer and is a member of the Financial Industry Regulatory Authority, Inc. ("FINRA") and the Securities Investor Protection Corporation ("SIPC"). Signature Securities is an introducing firm and, as such, clears its trades through National Financial Services, LLC, a wholly-owned subsidiary of Fidelity Investments. Signature Securities is also registered as an investment adviser. Our investment group directors work with our clients to define objectives, goals and strategies for their investment portfolios, whether our clients are looking for a relationship based provider or are looking for assistance with a particular transaction.

We offer a wide array of asset management and investment products, including the ability to purchase and sell all types of individual securities such as equities, options, fixed income securities, mutual funds, and annuities. We offer our clients an asset management program whereby we work with our clients to tailor their asset allocation according to their risk profile and then invest the client's assets either directly with a select group of high quality money managers, no load mutual funds, or a combination of both. We contract with a third party to perform investment manager due diligence for us on these money managers and mutual funds. We offer no proprietary products or services. We do not perform and we do not provide our clients with our own branded investment research. Instead, we have contracted with a number of third-party research providers and are able to provide our clients with traditional Wall Street research from a number of sources.

We also offer retirement products such as individual retirement accounts ("IRAs") and administrative services for retirement vehicles such as pension, profit sharing, and 401(k) plans to our clients. These products are not proprietary products.

Signature Securities offers wealth management services to our high net worth personal clients. Together with our client and their other professional advisors, including attorneys and certified public accountants, we develop a sophisticated financial plan that can include estate planning, business succession planning, asset protection, investment management, family office advisory services, bill payment, art and collectible advisory services and concentrated stock services.

### ***SBA Loans and Pools***

We are an active participant in the SBA loan and SBA pool secondary market by purchasing, securitizing, and selling the guaranteed portions of SBA Section 7(a) loans. Most SBA Section 7(a) loans have adjustable rates and float at a spread to the prime rate and reset monthly or quarterly. SBA loans consist of a guaranteed portion of the loan and an un-guaranteed balance, which typically represents 25% of the original balance that is retained by the originating lender. The guaranteed portions of SBA loans are backed by the full faith and credit of the U.S. government and, therefore, have minimal credit risk and carry a 0% risk weight for capital purposes. At December 31, 2018, we had $485.3 million in SBA loans held for sale, representing approximately 1.3% of our total funded loans, compared to $432.3 million at December 31, 2017.

The Bank purchases, sells and assembles SBA loans and pools. We are one of the largest SBA pool assemblers in the United States. Our primary business in the SBA related transactions is to be an active participant in the SBA loan and pool secondary market by purchasing, securitizing and selling the government guaranteed portions of the SBA loans. Signature Bank is approved by the SBA as a pool assembler.

We purchase the guaranteed portion of SBA loans from various SBA lender clients. Once purchased, we typically warehouse the guaranteed loan for approximately 30 to 180 days. From this warehouse, we aggregate like SBA loans by similar characteristics into pools for securitization and sale to the secondary market. In order to meet the SBA's rate requirement, we may strip excess servicing from loans with different coupons to create a pool at a common rate. This has resulted in the creation of two assets: a par pool and excess servicing strips. Excess servicing represents the portion of the coupon stripped from a loan. At December 31, 2018, the carrying amount of our SBA excess servicing strip assets totaled $152.8 million.

Colson Services Corp. ("Colson") is the third party government appointed fiscal and transfer agent for the SBA's Secondary Market Program. As the designated servicer, Colson provides transaction processing, record keeping and loan servicing functions, including document review and custody, payment collection and disbursement, and data collection and exchange for us.

### *Insurance Services*

We offer our business and private clients a wide array of individual and group insurance products, including health, life, disability and long-term care insurance products through our subsidiary, Signature Securities. We do not underwrite insurance policies. We only act as an agent in offering insurance products and services underwritten by insurers that we believe are the best for our clients in each category.

## Competition

There is significant competition among commercial banking institutions in the New York and West Coast metropolitan areas. We compete with other bank holding companies, national and state-chartered commercial banks, savings and loan associations, consumer finance companies, credit unions, securities brokerage firms, insurance companies, mortgage banking companies, money market mutual funds, asset-based non-bank lenders, and other financial institutions. Many of these competitors have substantially greater financial resources, lending limits and larger office networks than we do and are able to offer a broader range of products and services than we can. Because we compete against larger institutions, our failure to compete effectively for deposits, loans, and other clients in our markets could cause us to lose market share, slow our growth rate and may have an adverse effect on our financial condition and results of operations.

The market for banking and brokerage services is extremely competitive and allows consumers to access financial products and compare interest rates and services from numerous financial institutions located across the United States. As a result, clients of all financial institutions, including those within our target market, are sensitive to competitive interest rate levels and services. Our future success in attracting and retaining client deposits depends, in part, on our ability to offer competitive rates and services. Our clients are particularly attracted to the level of personalized service we provide. Our business could be impaired if our clients believe other banks provide better service or if they come to believe that higher rates are more important to them than better service.

## The New York Market

The majority of our business is located in the New York metropolitan area. We believe the New York metropolitan area economy presents an attractive opportunity to further grow an independent financial services company oriented to the needs of the New York metropolitan area economic marketplace. The New York Metropolitan Statistical Area ("MSA") is, by far, the largest market in the United States for bank deposits. The MSA of New York, Newark and Jersey City is – with approximately $1.8 trillion in total deposits, as of June 30, 2018 – more than three times larger than the second largest MSA in the U.S. (Sioux Falls, South Dakota). The recently entered San Francisco MSA is seventh largest in the U.S. at $370.8 billion. The New York MSA is also home to the largest number of businesses with fewer than 500 employees in the nation.

As of December 31, 2018, we operated 30 private client offices in the New York metropolitan area. These 30 offices housed a total of 99 private client banking teams. In 2018, three private client banking teams were added on the West Coast with the opening of our first full-service private client banking office in San Francisco. As part of the continuing development of our business strategy, we expect to add additional private client banking teams in 2019. We believe these additional teams will allow us to expand our current operations in the New York metropolitan area, as well as to the West Coast.

## Information Technology and System Security

We rely on industry leading technology companies to deliver software, support and certain disaster recovery services. Our core banking application software (Demand Deposit, Savings, Commercial Loans, General Ledger, Teller, and Internet Banking) is provided by Fidelity Information Services.

Our information technology environment includes the Fidelity Information Services' technology centers in Little Rock, Arkansas, Brown Deer, Wisconsin and Phoenix, Arizona. A combination of backup power generation, uninterruptible power systems and 24 hour a day monitoring of the facility perimeters, hardware, operating system software, network connectivity, and building environmental systems minimizes the risk of any serious outage or security breach. For disaster recovery purposes, full redundancy of the Little Rock and Brown Deer technology centers are provided through separate facilities located in Jacksonville, Florida and Wisconsin.

Our core brokerage systems are provided by and run at our clearing firm, National Financial Services, LLC, a subsidiary of Fidelity Global Brokerage Group, Inc. Our personnel connect to the system via both dedicated and internet based connections to National Financial Services in Boston, Massachusetts.

**Employees**

As of December 31, 2018, we had 1,393 full-time equivalent employees, 829 of whom were officers. None of our employees are represented by a collective bargaining agreement. We consider our relations with our employees to be good.

**Regulation and Supervision**

The following is a general summary of the material aspects of certain statutes and regulations applicable to Signature Bank and its subsidiaries. These summary descriptions are not complete, and you should refer to the full text of the statutes, regulations, and corresponding guidance for more information. These statutes and regulations are subject to change, and additional statutes, regulations, and corresponding guidance may be adopted. We are unable to predict these future changes or the effects, if any, that these changes could have on the business, revenues, and results of Signature Bank and its subsidiaries.

As a state-chartered bank, the deposits of which are insured by the FDIC, we and our subsidiaries are subject to a comprehensive system of bank supervision administered by federal and state banking agencies. Because we are chartered under the laws of the State of New York, the New York State Department of Financial Services ("DFS") is our primary regulator. We are also subject to the laws and regulations of the other states in which we do business. The FDIC is our primary federal banking regulator because we are not a member of the Federal Reserve System. We also are subject to enforcement and rulemaking authorities of the Bureau of Consumer Financial Protection (commonly referred to as the "CFPB") for financial products and services under its jurisdiction. These regulators oversee our compliance with applicable federal, New York and other state laws and regulations governing our activities, operations, and business. We are not controlled by a parent holding company, which would be subject to primary federal supervision by the Board of Governors of Federal Reserve System ("Federal Reserve") as a bank holding company. As a bank without a bank holding company, a relatively simple capital and corporate structure, and a traditional lending and deposit-taking business model, Signature Bank in certain respects is subject to somewhat less burdensome federal bank regulatory requirements than larger banks with more complex structures and activities and banks that are subsidiaries of bank holding companies. We are, however, subject to the disclosure and regulatory requirements of the Securities Exchange Act of 1934, as administered by the FDIC, certain investment advice rules promulgated by the Department of Labor ("DOL"), and the rules adopted for The NASDAQ Stock Market LLC that are applicable to listed companies.

The primary purpose of the U.S. system of bank supervision is to ensure the safety and soundness of banks in order to protect depositors, the FDIC insurance fund, and the financial system generally. It is not primarily intended to protect the interest of shareholders. Thus, if we were to violate banking law and regulations, including engaging in unsafe or unsound practices, we could be subject to enforcement actions and other sanctions that could be detrimental to shareholders. See "Risk Factors—We are subject to significant government regulation."

***Safety and Soundness Regulation***

New York law governs our authority to engage in deposit-taking, lending, investing, and other activities. New York law also imposes restrictions intended to ensure our safety and soundness, including limitations on the amount of money we can lend to a single borrower (generally, 15% of capital; 25% if the loan is secured by certain types of collateral), prohibitions on engaging in activities such as investing in equity securities or non-financial commodities, and prohibitions on making loans secured by our own capital stock.

The federal banking agencies have also adopted guidelines establishing safety and soundness standards for all insured depository institutions. The safety and soundness guidelines relate to our internal controls, information systems, internal audit systems, loan underwriting and documentation, compensation, and interest rate exposure. The standards assist the federal banking agencies with early identification and resolution of problems at insured depository institutions. If we were to fail to meet these standards, the FDIC could require us to submit a compliance plan and take enforcement action if an acceptable compliance plan were not submitted.

In addition, the FDIC, as a supervisory matter, expects us to have governance, internal control, compliance, and supervisory programs consistent with our size and activities. As the Bank approaches $50 billion in assets, the FDIC will generally expect us to develop and implement enhanced governance, internal control, compliance, and supervisory programs, to implement select banking regulations that do not technically apply to an institution of our size or structure, and to incur the costs to implement, staff, and maintain those programs. However, in May 2018, the Economic Growth, Regulatory Relief and Consumer Protection Act (the "Economic Growth Act") was enacted into law. Among other things, the Economic Growth Act raised the total asset threshold from $50 billion to $250 billion for automatic applicability of several regulatory requirements established under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") known as "enhanced prudential standards" which include requirements related to company-run stress testing, leverage limits, liquidity requirements, and resolution planning requirements for bank holding companies. On July 6, 2018, the federal banking agencies released an interagency statement providing that depository institutions without a holding company and with less than $250 billion in total consolidated assets are exempt from company stress testing requirements until November 2019, at which time such institutions will also be exempt from company run stress testing requirements under the Economic Growth Act.

Under the Economic Growth Act, the Federal Reserve maintains the authority to apply such requirements on a tailored basis to bank holding companies with total consolidated assets of $100 billion or more to address financial stability risks or safety and soundness concerns. The regulatory relief mandated by the Economic Growth Act with respect to bank holding companies with less than $100 billion in total consolidated assets may ultimately impact the FDIC's supervisory expectations with respect to banks of our asset size that do not have a holding company in order to avoid unnecessary burdens for depository institutions and to ensure consistency with the regulatory treatment of bank holding companies of a similar asset size.

The Economic Growth Act also enacted several important changes in certain technical compliance areas, for which the banking agencies issued certain corresponding proposed and interim final rules, including:

- Prohibiting federal banking regulators from imposing higher capital standards on High Volatility Commercial Real Estate ("HVCRE") exposures unless they are for acquisition, development or construction ("ADC"), and clarifying ADC status;
- Requiring the federal banking agencies to amend the liquidity coverage ratio rule ("LCR") such that all qualifying investment-grade, liquid and readily-marketable municipal securities are treated as level 2B liquid assets (i.e., assets with a lesser degree of liquidity and more volatility than level 2A assets, which include, for example, certain government securities, covered bonds and corporate debt securities), making them more attractive investment alternatives;
- Exempting from appraisal requirements certain transactions involving real property in rural areas and valued at less than $400,000; and
- Directing the CFPB to provide guidance on the applicability of the Truth in Lending Act ("TILA")- Real Estate Settlement Procedures Act ("RESPA") Integrated Disclosure rule (the "TRID Rule") to mortgage assumption transactions and construction-to-permanent home loans, as well the extent to which lenders can rely on model disclosures that do not reflect recent regulatory changes.

Federal law generally limits the equity investments of state-chartered banks insured by the FDIC to those that are permissible for national banks. Under regulations dealing with equity investments, an insured state bank generally may not, directly or indirectly, acquire or retain any equity investment of a type, or in an amount, that is not permissible for a national bank. An insured state bank is not prohibited from, among other things: (i) acquiring or retaining a majority interest in a subsidiary that is engaged in permissible activities; (ii) investing as a limited partner in a partnership the sole purpose of which is direct or indirect investment in the acquisition, rehabilitation, or new construction of a qualified housing project, provided that such limited partnership investments may not exceed 2% of the bank's total assets; (iii) acquiring up to 10% of the voting stock of a company that solely provides or reinsures liability insurance for directors, trustees or officers, or blanket bond group insurance coverage for insured depository institutions; and (iv) acquiring or retaining the voting shares of a depository institution if certain requirements are met. The direct or indirect activities conducted by a state bank as principal are similarly generally limited to those of a national bank. Exceptions include where approval is received for the activity from the FDIC.

***Restrictions on Dividends and Other Distributions***

On July 18, 2018, the Bank declared its inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018 to our common shareholders of record at the close of business on August 1, 2018. The Bank declared its second cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on November 15, 2018 to common shareholders of record at the close of business on November 1, 2018. On January 17, 2019, the Bank declared its third cash dividend of $0.56 per share, or a total of $30.8 million, which was paid on February 15, 2019 to common shareholders of record at the close of business on February 1, 2019.

Payments of dividends on our common stock may be subject to the prior approval of the DFS and of the FDIC. Under New York law, we are prohibited from declaring a dividend so long as there is any impairment of our capital stock. In addition, we would be required to obtain the approval of the DFS if the total of all our dividends declared in any calendar year would exceed the total of our net profits for that year combined with retained net profits of the preceding two years, less any required transfer to surplus or a fund for the retirement of any preferred stock. We would also be required to obtain the approval of the FDIC prior to declaring a dividend if after paying the dividend we would be undercapitalized, significantly undercapitalized, or critically undercapitalized. See "—Prompt Corrective Action and Enforcement Powers." In addition, the FDIC has stated that excessive dividends can negate strong earnings performance and result in a weakened capital position and that dividends generally can be disbursed, in reasonable amounts, only after losses are eliminated and necessary reserves and prudent capital levels are established.

In addition, on October 17, 2018, Bank stockholders approved our common stock repurchase program which provides the Bank the ability to repurchase common stock from shareholders in the open market up to $500 million.

Any future determination to pay dividends or repurchase shares will be at the discretion of our Board of Directors and will be dependent upon then-existing conditions, including our financial condition and results of operations, capital requirements, commercial real estate concentration, contractual restrictions, business prospects and other factors that the Board of Directors considers relevant. Share buybacks are also subject to shareholder and regulatory approval.

***Capital and Related Requirements***

We are subject to comprehensive capital adequacy requirements intended to protect against losses that we may incur. FDIC capital adequacy regulations require that we maintain a minimum ratio of qualifying total capital to total risk-weighted assets (including off-balance sheet items) of 8.0%, and a ratio of Tier 1 capital to total risk-weighted assets of 6.0%. Tier 1 capital is generally defined as the sum of core capital elements less goodwill and certain other deductions. Core capital includes common shareholders' equity, non-cumulative perpetual preferred stock, and minority interests in equity accounts of consolidated subsidiaries. Total capital includes Tier 1 capital, a limited amount of allowances for loan and lease losses, perpetual preferred stock, and subordinated debt. At December 31, 2018, our total risk-based capital ratio was 13.41%, and our Tier 1 risk-based capital ratio was 12.11%. We are also required to maintain a minimum leverage capital ratio—the ratio of Tier 1 capital (net of intangibles) to adjusted total assets—of 4.0%. At December 31, 2018, our leverage capital ratio was 9.70%. In addition, we must maintain a minimum common equity tier 1 capital ratio of 4.5 %. Common equity Tier 1 capital is a subset of Tier 1 capital that, for us, consists of common stock instruments that meet the eligibility criteria in FDIC regulations, retained earnings, accumulated other comprehensive income (loss) and common equity Tier 1 minority interest. At December 31, 2018, our common equity Tier 1 capital ratio was 12.11%.

The FDIC's current capital rules implement the "Basel III" regulatory capital reforms and changes required by the Dodd-Frank Act. "Basel III" refers to two consultative documents released by the Basel Committee on Banking Supervision ("BCBS") in December 2009, a rules text released in December 2010 and revised in June 2011, and loss absorbency rules issued in January 2011, which include significant changes to bank capital, leverage, and liquidity requirements. BCBS later released documents presenting specific liquidity tests for measuring banks' liquidity: the LCR, a test intended to promote the short-term resilience of the liquidity risk profile of banks that was presented in January 2013, and the net stable funding ratio ("NSFR"), a test intended to require banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. These liquidity tests also are considered part of Basel III.

On July 9, 2013, the FDIC approved final rules that substantially amended the regulatory risk-based capital rules applicable to Signature Bank, effective beginning January 1, 2015. The FDIC's final capital rules included new risk-based capital and leverage ratios, which where phased-in to effect over a multi-year period, and refine the definition of what constitutes "capital" for purposes of calculating those ratios. Full implementation of the capital rules for all institutions began on January 1, 2019. The minimum capital-level requirements applicable to Signature Bank under the final rules represented the following changes to the bank's capital adequacy requirements: (i) a new common equity Tier 1 risk-based capital ratio; (ii) an increase in the Tier 1 risk-based capital ratio minimum requirement from 4.0% to 6.0%; and (iii) a Tier 1 leverage ratio minimum requirement of 4.0% for *all* institutions, where prior to January 1, 2015, banks that received the highest rating of five categories used by regulators to rate banks and were not anticipating or experiencing any significant growth were required to maintain a leverage capital ratio of at least 3.0%. The final rules also established a "capital conservation buffer" above the new regulatory minimum capital requirements, which must consist entirely of common equity Tier 1 capital. The phase-in of the capital conservation buffer began on January 1, 2016, at a level of 0.625% of risk-weighted assets for 2016 and increased to 1.250% for 2017. The minimum buffer was 1.875% for 2018 and is currently 2.500%. As the capital rules are now fully implemented, the following effective minimum capital ratios currently apply: (i) a common equity Tier 1 capital ratio (plus capital conservation buffer) of 7.0%, (ii) a Tier 1 capital ratio (plus capital conservation buffer) of 8.5%, and (iii) a total capital ratio (plus capital conservation buffer) of 10.5%. Under the final rules, institutions are subject to limitations on paying dividends, engaging in share repurchases, and paying discretionary bonuses if their capital levels fall below the buffer amount. These limitations establish a maximum percentage of eligible retained income that could be utilized for such actions.

Basel III provided discretion for regulators to impose an additional buffer, the "countercyclical buffer," of up to 2.5% of common equity Tier 1 capital to take into account the macro-financial environment and periods of excessive credit growth. However, the final rules permit the countercyclical buffer to be applied only to "advanced approach banks" (i.e., banks with $250 billion or more in total assets or $10 billion or more in total foreign exposures), which currently excludes Signature Bank. The final rules also implement revisions and clarifications consistent with Basel III regarding the various components of Tier 1 capital, including common equity, unrealized gains and losses, as well as certain instruments that will no longer qualify as Tier 1 capital, some of which will be phased out over time.

The final rules set forth certain changes for the calculation of risk-weighted assets, which we have been required to utilize since January 1, 2015. The standardized approach final rule utilizes an increased number of credit risk exposure categories and risk weights, and also addresses: (i) an alternative standard of creditworthiness consistent with Section 939A of the Dodd-Frank Act; (ii) revisions to recognition of credit risk mitigation; (iii) rules for risk weighting of equity exposures and past due loans; (iv) revised capital treatment for derivatives and repo-style transactions; and (v) disclosure requirements for top-tier banking organizations with $50 billion or more in total assets that are not subject to the "advance approach rules" that apply to banks with greater than $250 billion in consolidated assets. Based on our current capital composition and levels, we believe that we are in compliance with the requirements as set forth in the final rules as they are presently in effect.

In 2017, the federal banking agencies adopted a final rule to extend the regulatory capital treatment applicable during 2017 under the capital rules for certain items, including regulatory capital deductions, risk weights, and certain minority interest limitations. The relief provided under the final rule applies to banking organizations that are not subject to the capital rules' advanced approaches, such as our Bank. Specifically, the final rule extends the current regulatory capital treatment of mortgage servicing assets ("MSAs"), deferred tax assets ("DTAs") arising from temporary differences that could not be realized through net operating loss carrybacks, significant investments in the capital of unconsolidated financial institutions in the form of common stock, non-significant investments in the capital of unconsolidated financial institutions, significant investments in the capital of unconsolidated financial institutions that are not in the form of common stock, and common equity Tier 1 minority interest, Tier 1 minority interest, and total capital minority interest exceeding the capital rules' minority interest limitations.

In addition, the federal banking agencies issued a notice of proposed rulemaking on simplifications to the final rules, a majority of which would apply solely to banking organizations that are not subject to the advanced approaches capital rule. Under the proposed rulemaking, non-advanced approaches banking organizations would apply a simpler regulatory capital treatment for MSAs; certain DTAs arising from temporary differences; investments in the capital of unconsolidated financial institutions; and capital issued by a consolidated subsidiary of a banking organization and held by third parties. Specifically, the proposed rulemaking would eliminate: (i) the capital rule's 10 percent common equity tier 1 capital deduction threshold that applies individually to MSAs, temporary difference DTAs, and significant investments in the capital of unconsolidated financial institutions in the

form of common stock; (ii) the aggregate 15 percent common equity tier 1 capital deduction threshold that subsequently applies on a collective basis across such items; (iii) the 10 percent common equity tier 1 capital deduction threshold for non-significant investments in the capital of unconsolidated financial institutions; and (iv) the deduction treatment for significant investments in the capital of unconsolidated financial institutions not in the form of common stock. The capital rule would no longer have distinct treatments for significant and non-significant investments in the capital of unconsolidated financial institutions, but instead would require that non-advanced approaches banking organizations deduct from common equity tier 1 capital any amount of MSAs, temporary difference DTAs, and investments in the capital of unconsolidated financial institutions that individually exceeds 25 percent of common equity tier 1 capital. The proposed rulemaking also includes revisions to the treatment of certain acquisition, development, or construction exposures that are designed to address comments regarding the current definition of high volatility commercial real estate exposure under the capital rule's standardized approach.

Also in 2017, the Basel Committee on Banking Supervision published the last version of the Basel III accord, generally referred to as "Basel IV." The Basel Committee stated that a key objective of the revisions incorporated into the framework is to reduce excessive variability of risk-weighted assets, which will be accomplished by: enhancing the robustness and risk sensitivity of the standardized approaches for credit risk and operational risk—which will facilitate the comparability of banks' capital ratios; constraining the use of internally modelled approaches; and complementing the risk-weighted capital ratio with a finalized leverage ratio and a revised and robust capital floor. Leadership of the federal banking agencies, who are tasked with implementing Basel IV, have supported the revisions, although their incorporation into to the existing regulatory capital framework described above is uncertain at this time.

In June 2016, the Financial Accounting Standards Board ("FASB") issued an accounting standard update, "Financial Instruments-Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments," which replaces the current "incurred loss" model for recognizing credit losses with an "expected loss" model referred to as the Current Expected Credit Loss ("CECL") model. Under the CECL model, we will be required to present certain financial assets carried at amortized cost, such as loans and leases held for investment and held-to-maturity debt securities, at the net amount expected to be collected. The measurement of expected credit losses is to be based on information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. On December 21, 2018, the federal banking agencies approved a final rule modifying their regulatory capital rules and providing an option to phase in over a period of three years the day-one regulatory capital effects of the CECL model. The final rule also revises the agencies' other rules to reflect the update to the accounting standards. The final rule will take effect April 1, 2019. We are currently evaluating the impact the CECL model will have on our accounting, but we expect to recognize a one-time cumulative-effect adjustment to our allowance for loan losses as of the beginning of the first reporting period in which we adopt the new standard, consistent with regulatory expectations set forth in interagency guidance issued at the end of 2016. We also expect to incur both transition costs and ongoing costs in developing and implementing the CECL methodology, and that the methodology will result in increased capital costs upon initial adoption as well as over time.

In addition to these capital rules, federal financial regulators have begun to adopt liquidity rules to implement the LCR and NSFR. The LCR is designed to ensure that a bank maintains an adequate level of unencumbered high-quality liquid assets equal to the bank's expected net cash outflow for a 30-day time horizon (or if greater, 25% of its expected total cash outflow) under an acute liquidity stress scenario. The NSFR is designed to promote more medium- and long-term funding of the assets and activities of banks over a one-year time horizon. These requirements would incentivize banks to increase their holdings of sovereign debt, including U.S. Treasury securities, as a component of assets and increase the use of long-term debt as a funding source.

In September 2014, the federal banking agencies approved final rules implementing the LCR for large, international banking organizations with $250 billion or more in consolidated assets or $10 billion or more in total on-balance sheet foreign exposure and their consolidated subsidiary banks, which does not apply to us based on our current total consolidated assets. Concurrently, the Federal Reserve adopted a modified version of the LCR for certain bank holding companies and savings and loan holding companies that have $50 billion or more in total consolidated assets but would not otherwise be covered by the LCR. The federal banking agencies published guidance regarding certain requirements of the LCR rule and the modified LCR rule in October 2017, but this guidance did not amend or materially alter the rules.

In April 2016, the federal banking agencies proposed rules to implement the NSFR. Like the LCR, the proposed NSFR would apply to large, international banking organizations with $250 billion or more in consolidated assets or

$10 billion or more in total on-balance sheet foreign exposure and their consolidated subsidiary banks and, in modified form, to certain bank holding companies and savings and loan holding companies that have $50 billion or more in total consolidated assets but would not otherwise be covered by the NSFR. In June 2017, the Treasury Department recommended a delay in the implementation of the proposed NSFR out of concern that the rule could be duplicative of other liquidity requirements and could therefore impose unnecessary compliance costs.

Pursuant to the Economic Growth Act, in November 2018, the FDIC together with the other federal banking agencies issued a joint statement proposing thresholds for the applicability of the LCR and the proposed NSFR. Under the proposal, the federal banking agencies are proposing four categories of standards for banking organizations, including depository institutions without a holding company, based on the following risk-based indicators: asset size, cross-jurisdictional activities, nonbank assets, weighted short-term wholesale funding, and off-balance sheet exposures. Category I institutions, which would include global systemically important banks ("G-SIBs") would continue to be subject to the most stringent regulatory requirements, and Category IV institutions (those with above $100 billion in total consolidated assets, but less than $250 billion in total consolidated assets and less than $75 billion in the other risk-based categories) would be subject to the least stringent requirements. Additionally, under the proposal, the Federal Reserve is proposing to eliminate all LCR and NSFR requirements for bank holding companies with less than $250 billion in total consolidated assets, with the exception of bank holding companies with over $100 billion in total consolidated assets and over $75 billion in total nonbank assets, weighted short-term wholesale funding or off-balance sheet exposures. Depository institutions with more than $10 billion in total consolidated assets that are the subsidiaries of bank holding companies of $250 billion in total consolidated assets would be subject to the same requirements. The asset applicability threshold for depository institutions without a holding company is $250 billion, therefore, we are not subject to the LCR or proposed NSFR under the current or proposed rules.

***Prompt Corrective Action and Enforcement Powers***

We are also subject to FDIC regulations that apply to every FDIC-insured commercial bank and thrift institution, a system of mandatory and discretionary supervisory actions that generally become more severe as the capital levels of an individual institution decline. The regulations establish five capital categories for purposes of determining our treatment under these prompt corrective action ("PCA") provisions: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," or "critically undercapitalized." As of December 31, 2018, the capital ratios of Signature Bank exceeded the minimum ratios established for a "well capitalized" institution.

As of January 1, 2015, the definitions of these capital categories changed in accordance with the federal banking agencies' final rule to implement Basel III and new minimum leverage and risk-based capital requirements. Under the revised PCA capital category definitions, we will be categorized as "well capitalized" if we (i) have a total risk-based capital ratio of 10.0% or greater; (ii) have a Tier 1 risk-based capital ratio of 8.0% or greater; (iii) have a common equity Tier 1 risk-based capital ratio of 6.5% or greater; (iv) have a leverage ratio of 5.0% or greater; and (v) are not subject to any written agreement, order, capital directive, or PCA directive issued by the FDIC to meet and maintain a specific capital level.

We will be categorized as "adequately capitalized" if we have (i) a total risk-based capital ratio of 8.0% or greater; (ii) a Tier 1 risk-based capital ratio of 6.0% or greater; (iii) a common equity Tier 1 capital ratio of 4.5% or greater; and (iv) a leverage ratio of 4.0% or greater (3.0% if we are rated in the highest supervisory category).

We will be categorized as "undercapitalized" if we have (i) a total risk-based capital ratio that is less than 8.0%; (ii) a Tier 1 risk-based capital ratio that is less than 6.0%; (iii) a common equity Tier 1 capital ratio that is less than 4.5%; or (iv) a leverage ratio that is less than 4.0%.

We will be categorized as "significantly undercapitalized" if we have (i) a total risk-based capital ratio that is less than 6.0%; (ii) a Tier 1 risk-based capital ratio that is less than 4.0%; (iii) a common equity Tier 1 capital ratio that is less than 3.0%; or (iv) a leverage ratio that is less than 3.0%.

We will be categorized as "critically undercapitalized" and subject to provisions mandating appointment of a conservator or receiver if we have a ratio of "tangible equity" to total assets that is 2.0% or less. "Tangible equity" generally includes core capital plus cumulative perpetual preferred stock.

In addition to measures taken under the PCA provisions, insured banks may be subject to potential actions by the federal regulators for unsafe or unsound practices in conducting their businesses or for violations of any law, rule, regulation or any condition imposed in writing by the agency or any written agreement with the agency. Enforcement actions may include the issuance of cease and desist orders, the imposition of civil money penalties, the issuance of directives to increase capital, formal and informal agreements, or removal and prohibition orders against "institution-affiliated" parties, and termination of insurance of deposits. The DFS also has broad powers to enforce compliance with New York laws and regulations. The DFS and/or the FDIC examine us periodically for safety and soundness and for compliance with applicable laws.

***Dodd-Frank Act***

The Dodd-Frank Act, which was signed into law on July 21, 2010, made extensive changes to the laws regulating financial services firms. The Dodd-Frank Act also required significant rulemaking and mandates multiple studies that have resulted and may continue to result in additional legislative and regulatory actions that will affect the operations of the Bank. Under the Dodd-Frank Act, federal banking agencies were required to draft and implement enhanced supervision, examination, and capital and liquidity standards for depository institutions. The capital provisions of the Dodd-Frank Act include, among other things, changes to capital and leverage limits and limitations on the use of hybrid capital instruments. See "—Capital Adequacy Requirements." The Dodd-Frank Act also imposed new restrictions on investments and other activities by depository institutions, particularly with respect to derivatives activities and proprietary trading. The Dodd-Frank Act also provided the federal banking agencies, such as the Federal Reserve and the FDIC, with additional latitude to monitor the systemic safety of the financial system and take responsive action, which could include imposing restrictions on the business activities of the Bank. In addition, the Dodd-Frank Act authorized the federal regulators to impose various new assessments and fees, which impacted the Bank's operational costs. The FDIC's special assessment enacted in connection with the increase of the minimum for the DIF reserve ratio to 1.35% was reached in September 2018. Therefore, this will no longer impact the Bank.

Prior to the second quarter of 2018, the Dodd-Frank Act required banks with total consolidated assets of more than $10 billion to conduct annual stress tests. However, as previously discussed, the Economic Growth Act raised the asset threshold for required Dodd-Frank Act Stress Tests ("DFAST") from $10 billion to $250 billion for bank holding companies and made the requirement "periodic" rather than "annual." Additionally, the Federal Reserve plans to continue capital stress testing of bank holding companies with total consolidated assets above $100 billion under its Comprehensive Capital Analysis and Review ("CCAR"), and the Economic Growth Act provides the Federal Reserve with discretion to subject bank holding companies with more than $100 billion in total assets to enhanced supervision on a tailored basis. Notwithstanding the regulatory relief mandated under the Economic Growth Act, the federal banking agencies indicated through interagency guidance that the capital planning and risk management practices of institutions with total assets less than $100 billion would continue to be reviewed through the regular supervisory process. The Bank will continue to perform capital stress testing on a situational and idiosyncratic basis, such as during our annual capital planning and budgeting processes. In addition, as noted above, the Economic Growth Act prohibits the federal banking agencies from requiring the Bank to assign a heightened risk weight to certain HVCRE ADC loans as previously required under the Basel III Capital Rules.

The Dodd-Frank Act also required the FDIC, in coordination with federal financial regulatory agencies, to issue regulations establishing methodologies for stress testing that provide for at least three different sets of conditions, including baseline, adverse, and severely adverse, and which require banks to publish a summary of the results of the stress tests. In October 2012, the FDIC issued a final rule regarding annual stress tests requiring a bank subject to the rule to assess the quarterly impact of stress scenarios on the bank's capital over a horizon of nine quarters. The Bank has developed a process to comply with the stress testing requirements, which involves Senior Management, Risk Management, and Finance, along with third-party consultants who assist in this process. The Risk Committee of the Board of Directors receives quarterly updates as to the progress and challenges in complying with this new regulatory requirement. In compliance with historical regulation, on July 28, 2017, we submitted our stress testing results on data as of December 31, 2016. We publicly disclosed our results for the severely adverse scenario on October 20, 2017. The stress testing results affirmed the adequacy of the Bank's capital, even under severe economic conditions. Due to the changes described above occurring in the second quarter of 2018, Signature Bank will no longer be required to file and report annual company-run stress tests until the revised threshold is reached.

In addition, in December 2013, federal regulators adopted a final rule implementing Section 619 of the Dodd-Frank Act, or the so-called “Volcker Rule”. The Volcker Rule prohibits (subject to certain exceptions) banks and their affiliates from engaging in short-term proprietary trading in securities and derivatives and from investing in and sponsoring certain unregistered investment companies defined in the rule as “covered funds” (including not only such things as hedge funds, commodity pools and private equity funds, but also a range of asset securitization structures that do not meet exemptive criteria in the final rules). Banks were required to conform their activities and investments to the final regulations’ requirements by July 21, 2015. The new rules also require banks to develop compliance and control programs, including board of directors oversight, appropriate for the size of the bank and the types and complexity of its activities. In January 2014, the federal regulators adopted an exemptive rule on an emergency basis to address the unanticipated impact of the new rules on bank ownership of certain trust preferred securities, and in December 2014, the Federal Reserve exercised its authority to extend the divestiture period for such pre-2014 investments to July 21, 2016. In July 2016, the Federal Reserve further extended the divestiture period to July 21, 2017.

Under the Economic Growth Act, banks with fewer than $10 billion in total consolidated assets are exempt from Volcker Rule requirements. Signature Bank has assets in excess of $10 billion and will therefore not benefit from this general exemption. The Economic Growth Act also amends the Volcker Rule’s restriction on sponsoring hedge funds and private equity funds to permit such funds to share the name or a variation of the same name of the banking entity that is an investment adviser to the fund provided that (1) the investment adviser is not a bank, bank holding company or a foreign banking organization that is treated as a bank holding company under the International Banking Act of 1978, (2) the investment adviser does not share the same name, or a variation of the same name, as a bank, bank holding company or a foreign banking organization that is treated as a bank holding company under the International Banking Act of 1978, and (3) the name does not contain the word “bank.” In December 2018, the federal banking agencies, the Securities and Exchange Commission (“SEC”) and the Commodity Futures Trading Commission published a notice of proposed rulemaking to implement these changes. The timing of the publication of a final rule is uncertain at this time.

In addition, in May 2018 the Federal Reserve published a notice of proposed rulemaking and request for public comment regarding certain simplifications to the Volcker Rule. Among other things, the proposed rule would: (i) tailor compliance requirements based on the size of a firm's trading assets and liabilities, with the most stringent requirements applied to firms with the most trading activity, (ii) revise the Volcker Rule’s definition of "trading account” by relying on commonly used accounting definitions, (iii) clarify that firms that trade within appropriately developed internal risk limits are engaged in permissible market making or underwriting activity, (iv) streamline the criteria that apply when a banking entity seeks to rely on the hedging exemption from the proprietary trading prohibition, (v) limit the impact of the Volcker Rule on the foreign activity of foreign banks, and (vi) simplify the trading activity information that banking entities are required to provide to federal banking agencies. If implemented as proposed, these simplifications may reduce our Volcker Rule compliance costs; however, we may incur certain costs in developing and implementing changes to our internal controls. Moreover, the rule proposal contained a series of questions related to the potential scope of the Volcker Rule, including specific questions regarding the regulatory treatment of covered funds. The resolution of these questions could impact our future strategies regarding loans and investments. The prospects and timing of any further action on this rule proposal are uncertain at this time.

The Bank had limited activities that were impacted by the Volcker Rule, and the only prohibited activity related to our holding of certain AFS securities in investment vehicles that met the definition of Covered Funds. These Covered Funds securities were either divested by the divestiture deadline in July 2017 or shortly thereafter with the exception of one private CMO re-REMIC security which was written-off in the first quarter of 2018, leaving the Bank zero exposure to Covered Funds securities since that time.

All federal prohibitions on the ability of financial institutions to pay interest on demand deposit accounts were repealed as part of the Dodd-Frank Act. As a result, beginning on July 21, 2011, financial institutions could commence offering interest on demand deposits to compete for clients. As of December 31, 2018, $12.02 billion, or 33.0%, of our total deposits were held in non-interest bearing demand deposit accounts. Thus far, the change has not had a meaningful effect on our business.

Applicable federal law governing interstate branching, as amended by the Dodd-Frank Act, generally permits a bank in one state to establish a de novo branch in another host state if state banks chartered in such host state would also be permitted to establish a branch in that state. Under these amendments, Signature Bank is permitted to establish branch offices in other states in addition to our existing New York branch offices. Notwithstanding the

above, we may be required to obtain the regulatory approval of the DFS, the FDIC and the banking agencies of the states in which we seek to establish branch or other offices. As such, in 2018, the Bank opened its first full-service private client banking office in San Francisco.

***Consumer Financial Protection***

Federal and state banking laws require us to take steps to protect consumers. Bank regulatory agencies are increasingly focusing attention on compliance with consumer protection laws and regulations. These laws include disclosures regarding truth in lending, truth in savings, and funds availability.

To promote fairness and transparency for mortgages, credit cards, and other consumer financial products and services, the Dodd-Frank Act established the CFPB. This agency is responsible for various functions, including conducting financial education programs; collecting, investigating, and responding to consumer complaints; and interpreting and enforcing federal consumer financial laws, as defined by the Dodd-Frank Act, that, among other things, govern the provision of deposit accounts along with mortgage origination and servicing. Some federal consumer financial laws enforced by the CFPB include the Equal Credit Opportunity Act, TILA, the Truth in Savings Act, the Home Mortgage Disclosure Act ("HMDA"), RESPA, the Equal Credit Opportunity Act, the Fair Debt Collection Practices Act, and the Fair Credit Reporting Act. The CFPB also is permitted to prevent any institution under its authority from engaging in an unfair, deceptive, or abusive act or practice in connection with consumer financial products and services.

In December 2013, the CFPB issued its final TRID Rule adopting integrated disclosure in connection with mortgage origination that incorporates disclosure requirements under RESPA and TILA. This disclosure requirement became effective in October 2015. The CFPB issued proposed amendments to the TRID Rule in July 2016, which were finalized in July 2017. The CFPB also issued interpretive guidance and updated model disclosure forms in 2017. In 2018, the CFPB adopted a final rule providing creditors with certain relief regarding the use of closing disclosures to reset tolerances in accordance with the TRID Rule.

In accordance with deadlines set by the Dodd-Frank Act, the CFPB also issued final rules in January 2013, which became effective in January 2014, that established new mortgage servicing standards and mortgage lending requirements using a "qualified mortgage" definition to fulfill the Dodd-Frank Act requirement that mortgage lenders consider a borrower's ability to repay. See "Risk Factors—Risks Relating to Our Industry—New regulations could restrict our ability to originate, service, and sell mortgage loans." In August 2016, the CFPB adopted a final rule providing additional borrower foreclosure protections under these standards.

Additionally, the CFPB has the authority to take supervisory and enforcement action against banks and other financial services companies under the agency's jurisdiction that fail to comply with federal consumer financial laws. As an insured depository institution with total assets of more than $10 billion, the Bank is subject to the CFPB's supervisory and enforcement authorities. The Dodd-Frank Act also permits states to adopt stricter consumer protection laws and state attorneys general to enforce consumer protection rules issued by the CFPB. The Bank is likely to continue to incur significant costs related to consumer protection compliance, including but not limited to potential costs associated with CFPB examinations, regulatory and enforcement actions and consumer-oriented litigation. Over the past several years, the CFPB has been very active in bringing enforcement actions against banks and nonbank financial institutions to enforce consumer financial laws, and has developed a number of new enforcement theories and applications of these laws; however, other federal financial regulatory agencies, including the FDIC, and state attorneys general also have been increasingly active in this area with respect to institutions over which they have jurisdiction. The CFPB proposed in February 2019 to delay the August 19, 2019 compliance date for the mandatory underwriting provisions of the regulation promulgated by the Bureau in November 2017 governing Payday, Vehicle Title, and Certain High-Cost Installment Loans to November 19, 2020.

***Sarbanes-Oxley Act of 2002***

The Sarbanes-Oxley Act of 2002 addresses, among other issues, corporate governance, auditing and accounting, executive compensation, and enhanced and timely disclosure of corporate information. As directed by the Sarbanes-Oxley Act, our Chief Executive Officer and Chief Financial Officer are required to certify that our quarterly and annual reports do not contain any untrue statement of a material fact. The rules adopted by the SEC under the Sarbanes-Oxley Act have several requirements, including having these officers certify that: they are responsible for establishing, maintaining and regularly evaluating the effectiveness of our internal control over

financial reporting; they have made certain disclosures to our auditors and the audit committee of the Board of Directors about our internal control over financial reporting; and they have included information in our quarterly and annual reports about their evaluation and whether there have been changes in our internal control over financial reporting or in other factors that could materially affect internal control over financial reporting.

***Community Reinvestment Act and Fair Lending***

We are subject to certain requirements and reporting obligations under the Community Reinvestment Act ("CRA"). The CRA generally requires 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. The CRA further requires the agencies to take into account our record of meeting community credit needs when evaluating applications for, among other things, new branches or mergers. We are also subject to analogous state CRA requirements in New York, California and other states in which we may establish branch offices. The performance standards and examination frequency of CRA evaluations differ depending on whether a bank falls into the small or large bank category. The FDIC's most recent CRA examination concluded as on February 8, 2016, and the most recent New York State examination concluded on December 31, 2014. Signature Bank was evaluated under the large bank standards. In measuring our compliance with these CRA obligations, the regulators rely on a performance-based evaluation system that bases our CRA rating on our actual lending service and investment performance. In connection with their assessments of CRA performance, the FDIC and DFS assign a rating of "outstanding," "satisfactory," "needs to improve," or "substantial noncompliance." Signature Bank received a "satisfactory" CRA Assessment Rating from both regulatory agencies in its most recent examinations

In August 2018, the Office of the Comptroller of the Currency ("OCC"), which regulates national banks, proposed an advanced notice of proposed rulemaking regarding potential reforms to the regulatory framework that implements the CRA. The OCC sought public comment on a variety of aspects of the regulations, including methods for the modernization of CRA performance methods, the interpretive standards used to determine banks' communities and assessment areas, and the potential expansion of CRA-qualifying activities. Although the OCC initiated this rulemaking process, any future rulemaking activity will likely occur in concert between the OCC and the other federal banking agencies, including the FDIC, as any amendments to the existing CRA regulations must be implemented uniformly. The prospects and timing of any future action on this rulemaking initiative are uncertain at this time.

Fair lending laws prohibit discrimination in the provision of banking services, and the enforcement of these laws has been an increasing focus for the CFPB, the Department of Housing and Urban Development ("HUD") and other regulators. Fair lending laws include the Equal Credit Opportunity Act of 1974 and the Fair Housing Act of 1968, which outlaw discrimination in credit and residential real estate transactions on the basis of prohibited factors including, among others, race, color, national origin, gender, and religion. A lender may be liable for policies that result in a disparate treatment of or have a disparate impact on a protected class of applicants or borrowers. If a pattern or practice of lending discrimination is alleged by a regulator, then that agency may refer the matter to the U.S. Department of Justice ("DOJ") for investigation. In December 2012, the DOJ and CFPB entered into a Memorandum of Understanding under which the agencies have agreed to share information, coordinate investigations and have generally committed to strengthen their coordination efforts. Given recent leadership changes at the DOJ and CFPB, as well as changes in DOJ enforcement policies and priorities, the extent to which such coordination will continue to occur in the near term is uncertain. Signature Bank is 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.

***Anti-Money Laundering Regulation***

We must also comply with the anti-money laundering ("AML") provisions of the Bank Secrecy Act ("BSA"), as amended by the USA PATRIOT Act, and implementing regulations issued by the FDIC and the Financial Crimes Enforcement Network ("FinCEN") of the U.S. Department of the Treasury. As a result, we must obtain and maintain certain records when opening accounts, monitor account activity for suspicious transactions, impose a heightened level of review on private banking accounts opened by non-U.S. persons and, when necessary, make certain reports to law enforcement or regulatory officials that are designed to assist in the detection and prevention of money laundering and terrorist financing activities. To this end, we are also required to maintain an anti-money laundering compliance program that includes policies, procedures, and internal controls; the appointment of an anti-money laundering compliance officer; an internal training program; and internal audits.

In 2016, the regulations implementing the BSA were amended by FinCEN to include express requirements regarding risk-based procedures for conducting ongoing customer due diligence. Such procedures require banks to take appropriate steps to understand the nature and purpose of customer relationships. In addition, absent an applicable exclusion, banks must identify and verify the identity of the beneficial owners of all legal entity customers at the time a new account is established. These requirements became effective in May 2018. We have incurred, and are likely to continue to incur, certain costs associated with the expansion and maintenance of our AML program in accordance with these requirements.

Signature Bank also is subject to New York AML laws and regulations. In June 2016, the DFS adopted a final rule that requires certain New York-regulated financial institutions, including Signature Bank, to comply with enhanced anti-terrorism and AML requirements beginning in 2017. The rule adds, among other AML program requirements, greater specificity to certain transaction monitoring and filtering requirements and the obligation to conduct an ongoing, comprehensive risk assessment and expressly eliminates a regulated institution's ability to adjust its monitoring and filtering programs to limit the number of alerts generated. Effective April 2018, the rule also required chief compliance officers to submit certifications of compliance with these requirements annually. Signature Bank has incurred, and likely will continue to incur, additional cost in complying with these requirements.

***Financial Privacy and Cybersecurity***

Under privacy protection provisions of the Gramm-Leach-Bliley Act of 1999 and related 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. Federal banking agencies, including the FDIC, have adopted guidelines for establishing information security standards and cybersecurity programs for implementing safeguards under the supervision of the board of directors. These guidelines, along with related regulatory materials, increasingly focus on risk management and processes related to information technology and the use of third parties in the provision of financial services. In October 2016, the federal banking agencies issued an advance notice of proposed rulemaking on enhanced cybersecurity risk-management and resilience standards that would apply to large and interconnected banking organizations and to services provided by third parties to these firms. These enhanced standards would apply to depository institutions and depository institution holding companies with total consolidated assets of $50 billion or more. The federal banking agencies have not yet taken further action on these proposed standards.

Signature Bank also is subject various federal and state privacy protection laws and regulations. On March 1, 2017, cybersecurity regulations issued by the DFS became effective. The cybersecurity regulations require banks, insurance companies, and other financial services institutions regulated by the DFS to establish and maintain a cybersecurity program designed to protect consumers and ensure the safety and soundness of New York State's financial services industry. These regulations require each regulated entity to assess its specific risk profile and design a program that addresses its risks in a robust fashion and, like the DFS's enhanced anti-terrorism and AML requirements, the regulations impose an obligation to conduct an ongoing, comprehensive risk assessment and require each institution's board of directors, or a senior officer of the institution, to submit annual certifications of compliance with these requirements. Signature Bank must certify its compliance with the cybersecurity regulations to the DFS on an annual basis. Signature Bank has incurred, and likely will continue to incur, additional costs in complying with these requirements.

***Transactions with Related Parties***

Transactions between banks and their affiliates are limited by Sections 23A and 23B of the Federal Reserve Act. An affiliate of a bank is any company or entity that controls, is controlled by or is under common control with the bank. In a holding company context, the parent bank holding company and any companies which are controlled by such parent holding company are affiliates of the bank.

Generally, Sections 23A and 23B of the Federal Reserve Act and Regulation W (i) limit the extent to which the bank or its subsidiaries may engage in "covered transactions" with any one affiliate to an amount equal to 10% of such institution's capital stock and surplus, and contain an aggregate limit on all such transactions with all affiliates to an amount equal to 20% of such institution's capital stock and surplus and (ii) require that all such transactions be on terms substantially the same, or at least as favorable, to the institution or subsidiary as those provided to non-affiliates. The term "covered transaction" includes the making of loans, purchase of assets, issuance of a guarantee and other similar transactions. In addition, loans or other extensions of credit by the financial institution

to the affiliate are required to be collateralized in accordance with the requirements set forth in Section 23A of the Federal Reserve Act. For purposes of the above, an “affiliate” does not include a subsidiary of the bank, unless the subsidiary is a financial subsidiary, is itself a depository institution, or is directly controlled by one or more affiliates of the parent bank or a shareholder, or group of shareholders, that controls the parent bank. In addition, the so-called “Super 23A” provisions of the Volcker Rule apply similar restrictions on transactions between a bank and any “covered fund” that the bank advises or sponsors.

The Sarbanes-Oxley Act of 2002 generally prohibits loans by a company to its executive officers and directors. However, the law contains a specific exception for loans by a depository institution to its executive officers and directors in compliance with federal banking laws, assuming such loans are also permitted under the law of the institution’s chartering state. The Federal Reserve Act and its implementing Regulation O also provide limitations on the ability of Signature Bank to extend credit to executive officers, directors and 10% shareholders (“insiders”). The law limits both the individual and aggregate amount of loans Signature Bank may make to insiders based, in part, on Signature Bank’s capital position and requires certain Board approval procedures to be followed. Such loans are required to be made on terms substantially the same as those offered to unaffiliated individuals and not involve more than the normal risk of repayment. There is an exception for loans made pursuant to a benefit or compensation program that is widely available to all employees of the institution and does not give preference to insiders over other employees. Loans to executive officers are further limited to specific categories.

***Change in Control***

The approval of the DFS is required before any person or group of persons deemed to be acting in concert may acquire “control” of a banking institution, which includes Signature Bank. “Control” is defined as the possession, directly or indirectly, of the power to direct or cause the direction of management and policies of a banking institution through ownership of stock or otherwise and is presumed to exist if, among other things, any company owns, controls, or holds the power to vote 10% or more of the voting stock of a banking institution. As a result, any person or company that seeks to acquire 10% or more of our outstanding common stock must obtain prior regulatory approval.

In addition to the New York requirements, the federal Bank Holding Company Act prohibits a company from, directly or indirectly, acquiring 25% or more (5% if the acquirer is a bank holding company) of any class of our voting stock or obtaining the ability to control in any manner the election of a majority of our directors or otherwise directing the management or policies of our company without prior application to and the approval of the Federal Reserve. Moreover, under the Change in Bank Control Act, any person or group of persons acting in concert who intends to acquire 10% or more of any class of our voting stock or otherwise obtain control over us would be required to provide prior notice to and obtain the non-objection of the FDIC.

***Incentive Compensation***

Guidelines adopted by the federal banking agencies pursuant to the Federal Deposit Insurance Act (“FDI Act”) 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 jointly adopted the Guidance on Sound Incentive Compensation Policies intended to ensure that banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. This guidance, which covers all employees that have the ability to expose the organization to material amounts of risk, 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 employee incentives that appropriately balance risk in a manner that does not encourage employees to expose their organizations to imprudent risk, (ii) be compatible with effective 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 the Bank’s compensation practices could lead to supervisory or enforcement actions by the FDIC.

Section 956 of the Dodd-Frank Act requires the federal banking agencies and the SEC to establish joint regulations or guidelines prohibiting incentive-based payment arrangements at specified regulated entities, such as us, having at least $1 billion in total assets 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 federal banking agencies proposed such regulations in April 2011 and issued a second proposed rule in April 2016. The second proposed rule would apply to all banks, among other institutions, with at least $1 billion in average total consolidated assets, and would go beyond the Guidance on Sound Incentive Compensation Policies discussed above to prohibit certain types and features of incentive-based compensation arrangements, require incentive-based compensation arrangements to adhere to certain basic principles, and require appropriate board or committee oversight and recordkeeping and disclosures to the appropriate agency. In addition, institutions with at least $50 billion in average total consolidated assets would be subject to additional compensation-related requirements and prohibitions. The prospects for continued consideration of these proposed rules by the SEC and federal banking agencies are uncertain, but implementation of any final rules is not expected in the near term.

In October 2016, the DFS also announced a renewed focus on employee incentive arrangements and issued new guidance to New York State-regulated banks to ensure that these arrangements do not encourage inappropriate practices. The guidance listed adapted versions of the key principles from the Guidance on Sound Incentive Compensation Policies as minimum requirements and advised these banks that incentive compensation arrangements must be subject to effective risk management, oversight, and control. In November 2016, the CFPB issued similar guidance to financial services companies, including the entities that it supervises. Incentive compensation and sales practices, particularly in connection with certain products and services that are viewed as high-risk from a supervisory perspective—such as cross-selling and overdraft services—continue to be priority issues on the examination and supervision agendas of the CFPB and the federal banking agencies.

In addition, the Tax Cuts and Jobs Act of 2017 ("TCJA"), which was signed into law in December 2017, contains certain provisions affecting performance-based compensation. Specifically, the pre-existing exception to the $1 million deduction limitation applicable to performance-based compensation was repealed. The deduction limitation is now applied to all compensation exceeding $1.0 million, for the Bank's covered employees, regardless of how it is classified, which would have an adverse effect on income tax expense and net income.

***Regulation of Signature Securities***

Signature Securities is registered as a broker-dealer with and subject to examination and supervision by the SEC. The SEC is the federal agency primarily responsible for the regulation of broker-dealers. Signature Securities is also subject to regulation by one of the brokerage industry's self-regulatory organizations, the Financial Industry Regulatory Authority ("FINRA"). As a registered broker-dealer, Signature Securities is subject to the SEC's uniform net capital rule. The purpose of the net capital rule is to require broker-dealers to have at all times enough liquid assets to satisfy promptly the claims of clients if the broker-dealer goes out of business. If Signature Securities fails to maintain the required net capital, the SEC and FINRA may impose regulatory sanctions including suspension or revocation of its broker-dealer license. A change in the net capital rules, the imposition of new rules, or any unusually large charge against Signature Securities' net capital could limit its operations. As a subsidiary of Signature Bank, Signature Securities is also subject to regulation and supervision by the DFS. Signature Securities currently is permitted to act as a broker and as a dealer in certain bank eligible securities.

In June 2018 the U.S. Court of Appeals for the Fifth Circuit issued a mandate vacating the DOL's "fiduciary rule" and related prohibited transaction exemptions, which had been enacted initially in 2016. As a result, although Signature Securities may have taken certain measures to comply with the rule on a transitional basis, our brokerage and investment advisory services and activities will no longer be affected. Separately, in April 2018, pursuant to the Dodd-Frank Act, the SEC proposed Regulation Best Interest, which, among other things, requires a broker-dealer to act in the best interest of a retail customer when making a recommendation of any securities transaction or investment strategy involving securities to such customer. We anticipate the adoption of any new rule by the SEC will require Signature Securities to review and possibly modify our compliance activities, which may lead to additional costs. In addition, state laws that impose a fiduciary duty also may require monitoring, as well as require that we undertake additional compliance measures.

Signature Securities is also subject to state insurance regulation. In July 2004, Signature Securities received approval from the New York State Banking Department and the New York State Department of Insurance (the pre-2011 predecessor agencies of the DFS) to act as an agent in the sale of insurance products. Signature Securities' insurance activities are subject to extensive regulation under the laws of the various states where its clients are located. The applicable laws and regulations vary from state to state, and, in every state of the United States, an

insurance broker or agent is required to have a license from that state. These licenses may be denied or revoked by the appropriate governmental agency for various reasons, including the violation of state regulations and conviction for crimes.

***Deposit Premiums and Assessments***

Under FDIC regulations, we are required to pay premiums to the Deposit Insurance Fund ("DIF") to insure our deposit accounts. The FDIC utilizes a risk-based premium system in which an institution pays premiums for deposit insurance on the institution's average consolidated total assets minus average tangible equity. For large insured depository institutions, generally defined as those with at least $10 billion in total assets, the assessment rate schedules combine regulatory ratings, PCA capital evaluations, and financial measures into two scorecards, one for most large insured depository institutions and another for highly complex insured depository institutions, to calculate assessment rates. A highly complex institution is generally defined as an insured depository institution with more than $50 billion in total assets that is controlled by a parent company with more than $500 billion in total assets. The assessment rate schedule includes an adjustment for significant amounts of brokered deposits applicable to large institutions that are either less than well capitalized or have a composite rating of "3," "4," or "5" under the Uniform Financial Institution Rating System. For such an institution, an assessment rate adjustment applies when its ratio of brokered deposits to domestic deposits is greater than 10%.

The Dodd-Frank Act 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. Banks with total assets of $10 billion or more are responsible for funding this increase. In March 2016, the FDIC adopted a final rule, which took effect on June 30, 2016, imposing a surcharge on banks with at least $10 billion in total assets at an annual rate of four and one-half basis points applied to the institution's assessment base (with certain adjustments) in order to reach a DIF reserve ratio of 1.35%. In conjunction with this surcharge, a new assessment rate schedule for the regular surcharge was implemented. Under the newly effective assessment rate schedules, the total base assessment rates for large and highly complex institutions range from 1 to 40 basis points. In total, the changes to the FDIC's assessments decreased our deposit insurance assessments by $1.7 million in 2018 compared to 2017. On September 30, 2018, the DIF reserve ratio reached 1.36%, exceeding the statutorily required minimum reserve ratio of 1.35% ahead of the September 30, 2020 deadline required under the Dodd-Frank Act. FDIC regulations provide that, upon reaching the minimum, surcharges on insured depository institutions with total consolidated assets of $10 billion or more will cease. The last quarterly surcharge was reflected in Signature Bank's December 2018 assessment invoice, which covered the assessment period from July 1 through September 30. March 2019 assessment invoices, which cover the assessment period from October 1, 2018, through December 31, 2018, no longer will include a quarterly surcharge. Assessment rates, which declined for all banks when the reserve ratio first surpassed 1.15% in the third quarter of 2016, are expected to remain unchanged. Assessment rates are scheduled to decrease when the reserve ratio exceeds 2%.

In addition, all FDIC-insured institutions are required to pay assessments to the FDIC to fund interest payments on bonds issued by the Financing Corporation ("FICO"), an agency of the federal government established to recapitalize the Federal Savings and Loan Insurance Corporation. The FICO assessment rates, which are determined quarterly, averaged 0.565 basis points of insured deposits on an annualized basis in fiscal year 2016. The FICO bonds mature from 2017 through 2019.

Historically, deposit insurance premiums we have paid to the FDIC have been deductible for federal income tax purposes; however, the Tax Cuts and Jobs Act of 2017 disallows the deduction of such premium payments for banking organizations with total consolidated assets of $50 billion or more. For banks with less than $50 billion in total consolidated assets, such as ours, the premium deduction is phased out based on the proportion of a bank's assets exceeding $10 billion. Based on our projections for 2019, we anticipate an increase to our deposit insurance premium payments, excluding the aforementioned surcharge.

***Other Regulatory Requirements***

Federal banking laws and regulations, including the Dodd-Frank Act and its implementing rules, apply increasingly stringent regulatory and supervisory requirements to banks or bank holding companies that cross total asset thresholds of $10 billion, $50 billion, and $250 billion. Signature Bank is positioned to be subject, in some instances, to somewhat lighter federal bank regulatory requirements than larger banks and banks that are subsidiaries of registered bank holding companies. As an organization with a bank as its top-level company and

with a relatively simple business model, Signature Bank, at its asset size of $47.36 billion as of December 31, 2018, is, and in the foreseeable future expects to be, subject to only some of these escalating requirements.

The FDI Act, as administered by the FDIC, restricts the acceptance of brokered deposits and imposes certain restrictions on deposit interest rates. Banks that do not maintain their regulatory capital above the level required to be "well capitalized" face tiered limits on their ability to accept or renew deposits classified as "brokered deposits." "Adequately capitalized" banks may not accept or renew brokered deposits unless they obtain a waiver from the FDIC. Brokered deposits include deposits obtained through a deposit broker. A "deposit broker" is broadly defined by statute and FDIC rules and interpretations. In some circumstances, employees of a bank and its subsidiaries can be treated as deposit brokers and the customer deposits that they are involved in servicing can be treated as brokered deposits. In January 2015, the FDIC issued guidance on its rules on brokered deposits, which it updated in June 2016, that reiterated the FDIC's views that use of brokered deposits to fund unsound or rapid expansion of loans and investment portfolios has contributed to institutions' weakened financial and liquidity positions over successive economic cycles and that the overuse of brokered deposits and the improper management of brokered deposits by problem institutions have contributed to bank failures and losses to the Deposit Insurance Fund. In December 2018, the FDIC published an advanced notice of proposed rulemaking soliciting public comment on its regulation of brokered deposits in light of the impact of changes in technology, business models and financial products in the decades since the adoption of statutory restrictions on banks' acceptance of brokered deposits. The timing and prospects for future rulemaking activity in this area are not certain at this time. In addition, the Economic Growth Act provides that reciprocal deposits are not treated as brokered deposits in the case of a "well capitalized" institution that received an "outstanding" or "good" rating on its most recent examination to the extent the amount of such deposits does not exceed the lesser of $5 billion or 20% of the bank's total liabilities. In December 2018, the FDIC published a final rule implementing these statutory changes. See "—Deposit Premiums and Assessments" for a discussion of the brokered-deposit assessment rate adjustment applicable to certain institutions.

We must maintain reserves on transaction accounts. The maintenance of reserves increases our cost of funds because reserves must generally be maintained in cash balances maintained directly or indirectly with a Federal Reserve Bank.

The Gramm-Leach-Bliley Act of 1999 eliminated most of the barriers to affiliations among banks, securities firms, insurance companies, and other financial companies previously imposed under federal banking laws if certain criteria are satisfied. Certain subsidiaries of well-capitalized and well-managed banks may be treated as "financial subsidiaries," which are generally permitted to engage in activities that are financial in nature, including securities underwriting, dealing, and market making; sponsoring mutual funds and investment companies; and activities that the Federal Reserve has determined to be closely related to banking.

Commercial real estate loans represent a significant portion of our loan portfolio. As of December 31, 2017, our ratio of total commercial real estate loans to total risk-based capital was 559.5%, and as of December 31, 2018, that ratio had decreased to 551.0%. From December 31, 2015 to December 31, 2018, the outstanding balance of our commercial real estate loan portfolio increased $9.33 billion, or 51.0%. Due to the risks associated with this type of lending, in 2006, the federal banking agencies, including the FDIC, issued guidance on commercial real estate concentration risk management. Under this guidance, a bank's commercial real estate lending exposure may receive increased supervisory scrutiny under certain circumstances, including where total commercial real estate loans represent 300% or more of an institution's total risk-based capital and the outstanding balance of the commercial real estate loan portfolio has increased by 50% or more during the preceding 36 months. In December 2015, the agencies released a new statement on prudent risk management for commercial real estate lending. In this statement, the agencies expressed concerns about easing commercial real estate underwriting standards, directed financial institutions to maintain underwriting discipline and exercise risk management practices to identify, measure, and monitor lending risks, and indicated that they will continue to pay special attention to commercial real estate lending activities and concentration going forward.

The FDIC regulates its supervised institutions' relationships with and management of third parties. Federal banking guidance requires us to conduct due diligence and oversight in third-party business relationships and to control risks in the relationship to the same extent as if the activity were directly performed by the Bank. In July 2016, the FDIC proposed new Guidance for Third-Party Lending to set forth safety and soundness and consumer compliance measures FDIC-supervised institutions should follow when lending through a business relationship with a third party.

***Future Legislation***

In January 2019, control of the U.S. House of Representatives was assumed by the Democratic Party. As a result, the leadership and roster of the House Financial Service Committee has also shifted. We anticipate that these changes will have a significant effect on the legislative and oversight agendas of the Committee. Specifically, we anticipate that the Committee will devote substantial attention to consumer protection matters, through greater oversight of the CFPB's and the federal banking agencies' efforts in this area. Prospects for future legislation remain uncertain; however, the divided control of the two chambers of Congress is likely to be a limiting factor on the enactment of any meaningful legislation.

## ITEM 1A. RISK FACTORS

*If any of the following risks actually occur, our business, financial condition or operating results could be materially adversely affected. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. As a result, we cannot predict every risk factor, nor can we assess the impact of all of the risk factors on our businesses or to the extent to which any factor, or combination of factors, may impact our financial condition and results of operations.*

**Risks Relating to Our Business**

***Volatility in global financial markets might continue and the federal government may continue to take measures to intervene.***

From late 2007 to 2009, the United States economy experienced the worst economic downturn since the Great Depression, resulting in a general reduction in business activity and growth across industries and regions as well as significant increases in unemployment. The federal government took significant measures in response to these events, such as enactment of the Emergency Economic Stabilization Act of 2008, other regulatory actions applicable to financial institutions and accommodative monetary policy. Although the U.S. and global financial markets have improved substantially since the financial crisis credit markets have continued to experience periods of disruption and inconsistency following adverse changes in the global economy, which may include trade negotiations with China and the political crisis in Venezuela. We cannot predict the federal government's responses to any further dislocation and instability in the global economy, and potential future government responses and changes in law or regulation may affect our business, results of operations and financial conditions. Additionally, economic conditions throughout the world remain uncertain. Concerns about the European Union ("EU"), including Britain's June 2016 referendum to exit the EU ("Brexit") and continued developments relating to Brexit, and the stability of the EU's sovereign debt, have caused uncertainty and disruption for financial markets globally. The ultimate outcome of the Brexit and the EU's financial support program, as well as the impact of any anticipated and future changes in global fiscal and monetary policy, are difficult to predict and may further deteriorate economic conditions or increase volatility in financial markets. We hold corporate debt securities issued by U.S. financial institutions that have material exposure to foreign countries. As such, deterioration of the economic conditions or increase in volatility of financial markets outside of the United States could have an adverse effect on the issuers of corporate debt that we hold. If such an effect were to negatively impact the ability of such issuers to pay their debts, it could have an adverse effect on our results of operations and financial condition. Furthermore, a slowdown or deterioration of economic conditions in other parts of the world may have an adverse effect on economic conditions in the United States, which could materially and adversely affect our financial condition and results of operations. We cannot predict the federal government's response to any dislocation or instability in the United States, and potential future government responses and changes in law or regulation may affect our business, results of operations and financial condition.

***Difficult market conditions may have an adverse impact on our industry.***

Uncertainty and deterioration in market conditions may have adverse effects on certain industries, may have an adverse effect on certain regional or national economic conditions in the United States, and may have an adverse effect on the market for commercial and industrial loans. In particular, we may face the following risks in connection with challenging market conditions:

- Commercial loans (including commercial and industrial loans and loans secured by commercial real estate) and multi-family mortgage loans constitute a substantial portion of our loan activity and loan portfolio. Difficult market conditions could have an adverse impact on the ability of borrowers, especially industries that are more exposed to those conditions, to make timely loan payments, which could lead to losses on such loans. Any significant losses on such loans could adversely affect our financial condition and results of operations.
- Market developments may affect confidence levels and may cause declines in credit usage and adverse changes in payment patterns, as well as increases in delinquencies and default rates, which we expect would negatively impact our provision for loan and lease losses.
- The process we use to estimate losses inherent in our credit exposure requires difficult, subjective, and complex judgments, including forecasts of economic conditions and how these economic predictions might impair the ability of our borrowers to repay their loans, which may no longer be capable of accurate estimation which may, in turn, impact the reliability of the process.
- As discussed further below, shifts in prevailing interest rates and the value of domestic and foreign currencies may have an adverse effect on our earnings and capital and our ability to engage in lending activities. Moreover, prolonged periods of low prevailing interest rates may negatively impact our net interest margins, which may affect the profitability of our loan products and the Bank as a whole.

***Fiscal challenges facing the U.S. government could negatively impact financial markets which in turn could have an adverse effect on our financial position or results of operations.***

Many of our investment securities are issued by the U.S. government and government agencies and sponsored entities. As a result of uncertain domestic political conditions, including the recent federal government shutdown and potential future federal government shutdowns, the possibility of the federal government defaulting on its obligations for a period of time due to debt ceiling limitations or other unresolved political issues, investments in financial instruments issued or guaranteed by the federal government pose economic and liquidity risks. Following the government shutdown in 2011, Standard & Poor's lowered its long term sovereign credit rating on the U.S. from AAA to AA+. A further downgrade or a downgrade by other rating agencies, as well as sovereign debt issues facing the governments of other countries, could have a material adverse impact on financial markets and economic conditions in the U.S. and worldwide. In addition, the U.S. government and the governments of other countries took steps to stabilize the financial system, including investing in financial institutions, and implementing programs to improve general economic conditions, but there can be no assurances that these efforts will restore long-term stability and that they will not result in adverse unintended consequences. A prolonged government shutdown may also adversely impact a significant segment of our customer base resulting in increased defaults within our loan portfolio, which could adversely affect our financial condition and results of operations.

***We may be unable to successfully implement our business strategy.***

We intend to continue to pursue our strategy for growth. In order to execute this strategy successfully, we must, among other things:

- assess market conditions for growth;
- build our client base;
- maintain credit quality;
- properly manage risks, including operational risks, credit risks and interest rate risks;
- attract sufficient core deposits to fund our anticipated loan growth;
- identify and attract new banking group directors and teams;
- identify and pursue suitable opportunities for opening new banking locations; and
- maintain sufficient capital to satisfy regulatory requirements.

Failure to manage our growth effectively could have a material adverse effect on our business, future prospects, financial condition or results of operations and could adversely affect our ability to successfully implement our growth strategy.

***We may be unable to successfully integrate new business lines into our existing operations.***

During 2013, we added a team focused on asset-based lending, marking our entry into that arena, in order to diversify revenue streams and further broaden our offerings to middle market commercial clients. Subsequently, in 2014, we expanded the product lines of Signature Financial, which was established in 2012, by adding national franchise financing and commercial marine financing. In 2015, the Bank launched a new wholly owned subsidiary, Signature Public Funding, further expanding product lines to include a range of municipal finance and tax-exempt lending and leasing products to government entities throughout the country, including state and local governments, school districts, fire and police and other municipal entities. In October 2018, we launched a Fund Banking Division to provide financing and banking services to the private equity industry by offering subscription lines of credit, management company lines of credit and general partner loans. In December 2018, the Bank announced the unveiling of its digital payments platform, Signet, to our commercial clients. The Signet platform enables real-time payments between our commercial clients and was placed in service effective January 1, 2019. Although we continue to expend substantial managerial, operating and financial resources as our business grows, we may be unable to successfully continue the integration of these new business lines, and we may be unable to realize the expected revenue contributions. Moreover, we may not be as successful in managing new business lines as we have been for business lines with which we have more experience. We will be required to employ and maintain qualified personnel, and as our business expands into new and existing markets, we may be required to install additional operational and control systems. Any failure to successfully manage this integration may adversely affect our future financial condition and results of operations.

***Our operations are affected significantly by interest rate levels and we are vulnerable to changes in interest rates.***

We incur interest rate risk. Our income and cash flows and the value of our assets depend to a great extent on the difference between the interest rates we earn on interest-earning assets, such as loans and investment securities, and the interest rates we pay on interest-bearing liabilities such as deposits and borrowings. These rates are highly sensitive to many factors beyond our control, including general economic conditions and policies of various governmental and regulatory agencies, particularly of the Federal Reserve. Changes in monetary policy, including changes in interest rates, significantly influence the interest we earn on our loans and investment securities and the amount of interest we pay on deposits and borrowings. Interest rates have moved above their recent historical lows. The Federal Reserve increased its benchmark short-term interest rate four times in fiscal 2018 in 25 basis point increments, compared with three 25 basis point increases in fiscal 2017 and one 25 basis point increase in fiscal 2016. Such changes can significantly affect our ability to originate loans and obtain deposits and our costs in doing so.

The Bank also entered into several interest rate swap contracts to manage our fair value and cash flow exposures to changes in benchmark interest rates. The periodic net settlements of these interest rate swaps could either result in a pay or receive position dependent upon the associated benchmark interest rate compared to the associated contractual terms. See Risk Factors—"The planned phasing out of LIBOR as a financial benchmark presents risks to the financial instruments originated or held by Signature Bank."

If the rate of interest we pay on our deposits and other borrowings increases more than the rate of interest we earn on our loans and other investments, our net interest income and, therefore, our earnings could be materially adversely affected. Our earnings could also be materially adversely affected if the interest rates on our loans and other investments fall more quickly than those on our deposits and other borrowings or if they remain low relative to the rates on our deposits and other borrowings. Furthermore, an increase in interest rates may negatively affect the market value of securities in our investment portfolio. Our fixed-rate securities, generally, are more negatively affected by these increases. A reduction in the market value of our portfolio will increase the unrealized loss position of our available-for-sale investments. Based upon our current interest rate swap strategy, a reduction in interest rates could also negatively impact the net settlement of our interest rate swaps and the corresponding net interest income.

Any of these events could materially adversely affect our results of operations or financial condition. For a discussion of our interest rate risk management process, see "Item 7A. Quantitative and Qualitative Disclosures

About Market Risk."

***The planned phase out of LIBOR as a financial benchmark presents risks to the financial instruments originated or held by Signature Bank.***

The London Interbank Offered Rate ("LIBOR") is the reference rate used for many of our transactions, including our lending and borrowing and our purchase and sale of securities, as well as the derivatives that we use to manage risk related to such transactions. However, a reduced volume of interbank unsecured term borrowing coupled with recent legal and regulatory proceedings related to rate manipulation by certain financial institutions has led to international reconsideration of LIBOR as a financial benchmark. The United Kingdom Financial Conduct Authority ("FCA"), which regulates the process for establishing LIBOR, announced in July 2017 that the sustainability of LIBOR cannot be guaranteed. Accordingly, the FCA intends to stop persuading, or compelling, banks to submit to LIBOR after 2021. Until such time, however, FCA panel banks have agreed to continue to support LIBOR. Several authorities within the United Kingdom and the European Union are working in parallel on proposals to transition from LIBOR to other financial benchmarks. It is impossible to predict what benchmark rate(s) may replace LIBOR or how LIBOR will be determined for purposes of financial instruments that are currently referencing LIBOR if and when it ceases to exist. The uncertainty surrounding potential reforms, including with respect to factors such as the use of alternative, market-based reference rates, changes to the methods and processes used to calculate rates, the quality of the data upon which rates will be based, and how closely rates will track to LIBOR may limit the extent to which markets accept alternative rates, which may, in turn, have an adverse effect on the trading market for LIBOR-based securities, loan yields, and the amounts received and paid on derivatives instruments. In addition, the implementation of LIBOR reform proposals may result in increased compliance costs and operational costs, including costs related to continued participation in LIBOR.

***We compete with many larger financial institutions which have substantially greater financial and other resources than we have.***

There is significant competition among commercial banking institutions in the New York metropolitan area and, also, on the West Coast where we recently opened our first full-service private client banking office in 2018. We compete with bank holding companies, national and state-chartered commercial banks, savings and loan associations, consumer finance companies, credit unions, securities brokerage firms, insurance companies, mortgage banking companies, money market mutual funds, asset-based non-bank lenders and other financial institutions. Many of these competitors have substantially greater financial resources, lending limits and larger office networks than we do, and are able to offer a broader range of products and services than we can. Because we compete against larger institutions, our failure to compete effectively for deposit, loan and other clients in our markets could cause us to lose market share or slow our growth rate and could have a material adverse effect on our financial condition and results of operations.

The market for banking and brokerage services is extremely competitive and allows consumers to access financial products and compare interest rates and services from numerous financial institutions located across the United States. As a result, clients of all financial institutions, including those within our target market, are sensitive to competitive interest rate levels and services. Our future success in attracting and retaining client deposits depends, in part, on our ability to offer competitive rates and services. Competition with respect to the rates we pay on deposits relative to the rates we obtain on our loans and other investments may put pressure on our profitability. Our clients are also particularly attracted to the level of personalized service we can provide. Our business could be impaired if our clients believe other banks provide better service or if they come to believe that higher rates are more important to them than better service.

In addition, the financial services industry is undergoing rapid technological changes, with frequent introductions of new technology-driven products and services including internet services, cryptocurrencies and payment systems. In addition to improving the ability to serve clients, the effective use of technology increases efficiency and enables financial institutions to reduce long-term costs. These technological advancements also have made it possible for non-financial institutions, such as so-called "fintech companies" and marketplace lenders, to offer products and services that have traditionally been offered by financial institutions. Federal and state banking agencies continue to deliberate over the regulatory treatment of fintech companies, including whether the agencies are authorized to grant charters or licenses to such companies and whether it would be appropriate to do so in consideration of several regulatory and economic factors. Our future success will depend, in part, upon our ability to address the needs of our clients by using technology, including the use of the Internet, to provide products and services that will satisfy client demands for convenience, as well as to create additional efficiencies in our operations. New

technologies, such as the blockchain technology used in the Bank's Signet platform, could require us to spend more to modify or adopt our products to attract and retain clients or to match products and services offered by our competitors, including fintech companies. New technologies also expose us to additional operational, as well as financial risks. Because many of our competitors have substantially greater resources to invest in technological improvements than we do, or, at present, operate in a less-burdensome regulatory environment, these institutions could pose a significant competitive threat to us.

***Government intervention in the banking industry has the potential to change the competitive landscape.***

There has been significant government intervention in the banking industry in response to the economic crisis of 2008, including equity investments, liquidity facilities and guarantees. Although the Dodd-Frank Act limited the ability of the federal government to provide emergency assistance to individual financial institutions, it is possible that the federal government could take certain steps to intervene in the banking industry in order to stabilize the financial system in the event of future disruptions. The federal government's past actions have affected the competitive landscape in certain respects. For example, clients may view some of our competitors as being "too big to fail," meaning that such competitors may thereby benefit from an implicit U.S. government guarantee beyond that provided to banks generally. Any such intervention, or the perception of the possibility of such intervention, could adversely affect our competitive standing and profitability.

In addition, certain government programs introduced during the economic crisis may give rise to new competitors. For instance, non-bank lenders, some pursuing non-traditional models, which are not, at present, subject to regulatory capital limits or bank supervision, have become active competitors. Certain state regulatory agencies have adopted "regulatory sandboxes," which provide for certain exemptions from licensing and other functional regulatory requirements for fintech companies that provide certain innovative financial products and services. In December 2016, the OCC announced that it would explore the possibility of using its chartering authority to grant certain fintech companies a special purpose national bank charter. In July 2018, the OCC adopted a policy statement providing that it would begin accepting applications for special purpose national bank charters from fintech companies which are engaged in the business of banking, but do not take deposits. These developments are likely to result in increased competition for our clients' banking business. Similarly, the FDIC introduced a bidding process for institutions that have been or will be placed into receivership by federal or state regulators and made the process open to existing financial institutions, as well as groups without pre-existing operations. This process and other programs like it that exist now or that may be developed in the future could give rise to a significant number of new competitors, which could have a material adverse effect on our business and results of operations.

***We are vulnerable to downgrades in credit ratings for securities within our investment portfolio.***

Although approximately 99.2% of our portfolio of investment securities was rated investment grade as of December 31, 2018, we remain exposed to potential investment rating downgrades by credit rating agencies of the issuers and guarantors of securities in our investment portfolio. A significant volume of downgrades would negatively impact the fair value of our securities portfolio, resulting in a potential increase in the unrealized loss in our investment portfolio, which could negatively affect our earnings. Rating downgrades of securities to below investment grade level and other events may result in impairment of such securities, requiring recognition of the credit component of the other-than-temporary impairment as a charge to current earnings.

***We are vulnerable to illiquid market conditions, resulting in the potential for significant declines in the fair value of our investment portfolio and taxi medallions.***

In cases of illiquid or dislocated marketplaces, there may not be an available market for certain securities in our portfolio. For example, mortgage-related assets have experienced, and are likely to continue to experience, periods of illiquidity, caused by, among other things, an absence of a willing buyer or an established market for these assets, or legal or contractual restrictions on sale. Shifts in market conditions may create dislocations in the market for bank-collateralized pooled trust preferred securities and may limit other securities that we hold. Adverse market conditions that include bank failures could result in a significant decline in the fair value of these securities. We have in the past, and may in the future, be required to recognize the credit component of the additional other-than-temporary impairments as a charge to current earnings resulting from the decline in the fair value of these securities.

Additionally, taxi medallions have experienced, and may continue to experience, periods of illiquidity, caused by, among other things, increased competition from Transportation Network Companies and the significant decline in the underlying New York City taxi medallion collateral value**.** Although the NYC taxi medallion market has shown signs of stabilization since the second quarter of 2018, potential reemergence of adverse conditions could result in a further decline in the fair value of these medallions. We have in the past, and may in the future, be required to recognize additional charge-offs, increase related reserves, or recognize negative fair value adjustments to repossessed assets as a result of the decline in the fair value of these assets.

***We primarily invest in mortgage-backed obligations and such obligations may be impacted by market dislocations, declining home values and prepayment risk, which may lead to volatility in cash flow and market risk and declines in the value of our investment portfolio.***

Our investment portfolio largely consists of mortgage-backed obligations primarily secured by pools of mortgages on single-family residences.

The value of mortgage-backed obligations in our investment portfolio may fluctuate for several reasons, including (i) delinquencies and defaults on the mortgages underlying such obligations, particularly if unemployment and under-employment rates were to return to elevated levels, (ii) falling home prices, (iii) lack of a liquid market for such obligations, and (iv) uncertainties in respect of government-sponsored enterprises such as the Federal National Mortgage Association ("Fannie Mae") or the Federal Home Loan Mortgage Corporation ("Freddie Mac"), which guarantee such obligations. Home values have declined significantly prior to and in the aftermath of the financial crisis. Although home prices have stabilized in many housing markets in recent years, if the value of homes were to materially decline, the fair value of the mortgage-backed obligations in which we invest may also decline. Any such decline in the fair value of mortgage-backed obligations, or perceived market uncertainty about their fair value, could adversely affect our financial position and results of operations.

In addition, when we acquire a mortgage-backed security, we anticipate that the underlying mortgages will prepay at a projected rate, thereby generating an expected yield. Prepayment rates generally increase as interest rates fall and decrease when rates rise, but changes in prepayment rates are difficult to predict. In light of recent historically low interest rates, many of our mortgage-backed securities have a higher interest rate than prevailing market rates, resulting in a premium purchase price. In accordance with applicable accounting standards, we amortize the premium over the expected life of the mortgage-backed security. If the mortgage loans securing the mortgage-backed security prepay more rapidly than anticipated, we would have to amortize the premium on an accelerated basis, which would thereby adversely affect our profitability.

***Adverse developments in the residential mortgage market may adversely affect the value of our investment portfolio.***

Although there has been recent improvement, the residential mortgage market in the United States may experience a variety of difficulties related to changing economic conditions, including an increase in unemployment and under-employment rates, heightened defaults, credit losses and liquidity concerns. Historically, economic disruptions, including those relating to recent international trade negotiations, have adversely affected the performance and fair value of many of the types of financial instruments in which we invest and similar future conditions may produce the same impact. Many residential mortgage-backed securities have been downgraded by rating agencies over the past decade. As a result of these difficulties and changed economic conditions, many companies operating in the mortgage sector failed and others faced serious operating and financial challenges during the credit-crisis. In the aftermath of the financial crisis, the Federal Reserve took certain actions in an effort to ameliorate market conditions; however, its ability to do so in the future may be limited by political, economic and legal factors and any such efforts may be ineffective. While the housing market has stabilized and economic conditions improved, as a result of these factors, among others, the market for these securities may be adversely affected for a significant period of time.

Adverse conditions in the residential mortgage market also negatively impacted other sectors in which the issuers of securities in which we invest operate, which adversely affected, and may continue to adversely affect, the fair value of such securities, including private collateralized mortgage obligations and bank-collateralized pooled trust preferred securities, in our investment portfolio.

***If the U.S. agencies or U.S. government-sponsored enterprises were unable to pay or to guarantee payments on their securities in which we invest, our results of operations would be adversely affected.***

A large portion of our investment portfolio consists of mortgage-backed securities and collateralized mortgage

obligations issued or guaranteed by Fannie Mae or Freddie Mac and debentures issued by the Federal Home Loan Banks ("FHLBs"), Fannie Mae and Freddie Mac. Fannie Mae, Freddie Mac and the FHLBs are U.S. government-sponsored enterprises but their guarantees and debt obligations are not backed by the full faith and credit of the United States.

The economic crisis, especially as it relates to the residential mortgage market, adversely affected the financial results and stock values of Fannie Mae and Freddie Mac and resulted in the value of the debt securities issued or guaranteed by Fannie Mae and Freddie Mac becoming unstable and relatively illiquid compared to prior periods. In recent years, Fannie Mae and Freddie Mac were able to overcome the market disruptions of the economic crisis and have been profitable since 2013. However, the future of Fannie Mae and Freddie Mac remains uncertain. Members of Congress have recently introduced bills that would reform the housing finance system and government-sponsored enterprises. Among these bills was a proposal to wind down Fannie Mae and Freddie Mac over a period of time, and to restrict the activities of these enterprises before the wind down. Alternatively, there have been proposals to privatize Fannie Mae and Freddie Mac. We are unable to predict whether these other proposals will be adopted, and, if so, what the effect of the adopted reform would be. U.S. debt ceiling and budget deficit concerns in recent years have increased the possibility of additional U.S. government shutdowns, credit-rating downgrades and economic slowdowns, or a recession in the United States. Although U.S. lawmakers have passed legislation to raise the federal debt ceiling on multiple occasions, ratings agencies have lowered or threatened to lower the long-term sovereign credit rating on the United States. In recent years uncertainty regarding the U.S. Federal budget has increased as the current Administration and Congress work on their future budget plans. Any further downgrades to the U.S. government's sovereign credit rating or its perceived creditworthiness could adversely affect the ability of the U.S. government to support the financial stability of Fannie Mae, Freddie Mac and the FHLBs.

Should the U.S. government contain, reduce or eliminate support for the financial stability of Fannie Mae, Freddie Mac and the FHLBs, the ability for those entities to operate as independent entities is questionable. Any failure by Fannie Mae, Freddie Mac or the FHLBs to honor their guarantees of mortgage-backed securities, debt or other obligations will have severe ramifications for the capital markets and the financial industry. Any failure by Fannie Mae, Freddie Mac or the FHLBs to pay principal or interest on their mortgage guarantees and debentures when due could also materially adversely affect our results of operations and financial condition.

***There are material risks involved in commercial lending, which generally involves a higher risk than residential mortgage loans, that could adversely affect our business.***

Commercial loans represented approximately 99% of our total loan portfolio as of December 31, 2018, and our business plan calls for continued efforts to increase our assets invested in commercial loans. Our credit-rated commercial loans include commercial and industrial loans to our privately-owned business clients along with loans to commercial borrowers that are secured by real estate (commercial property, multi-family residential property, 1–4 family residential property, and acquisition, development and construction). Commercial loans generally involve a higher degree of credit risk than residential mortgage loans do, in part, to their larger average size and less readily-marketable collateral. In addition, unlike residential mortgage loans, commercial loans generally depend on the cash flow of the borrower's business to service the debt.

A significant portion of our commercial loans depend primarily on the liquidation of assets securing the loan for repayment, such as real estate, inventory and accounts receivable. These loans carry incrementally higher risk, because their repayment often depends solely on the financial performance of the borrower's business. In addition, the federal banking agencies, including the FDIC, have applied increased regulatory scrutiny to institutions with commercial loan portfolios that are fast growing or large relative to the institutions' total capital. For a discussion of supervisory issues associated with commercial real estate portfolio concentration, see "Regulation and Supervision—Other Regulatory Requirements."

For all of these reasons, increases in nonperforming commercial loans could result in operating losses, impaired liquidity and the erosion of our capital, and could have a material adverse effect on our financial condition and results of operations. Credit market tightening could adversely affect our commercial borrowers through declines in their business activities and adversely impact their overall liquidity through the diminished availability of other borrowing sources or otherwise.

***Adverse economic conditions or other factors adversely affecting our target market segment may have a greater adverse effect on us than on other financial institutions that have a more diversified client base.***

Historically, one of our target market segments has been the taxi industry and loans secured by taxi medallions. As a result, we have greater exposure to this market segment than other financial institutions that have a more diversified client base. The increased competition from Transportation Network Companies within the taxi industry and the significant decline in the underlying New York City taxi medallion collateral value in 2017 and 2018 caused substantial doubt on the collectability of these loans. As a result, we placed the entire taxi medallion portfolio on nonaccrual in 2017. Due to the continued price decline in early 2018, we recorded $132.8 million in write downs in the first quarter, primarily related to New York City taxi medallions. Our taxi medallion exposure reduced to $88.5 million (or 1.11% of our commercial and industrial loans) as of December 31, 2018, compared to $309.9 million (or 4.86%) at the end of the prior year. In 2018, we restructured $14.7 million of these loans (or 16.6% of our total outstanding balance) as of December 31, 2018; we may need to restructure additional taxi medallion loans in 2019, if market conditions deteriorate. If we are unable to restructure such loans successfully or we are unable to repossess and dispose of medallions at a price that is adequate to cover the outstanding balance of such loans, then our financial condition and results of operations may be materially adversely affected.

***Our business and substantially all of our real estate collateral is concentrated in the New York metropolitan area, and a downturn in the economy and the real estate market of the New York metropolitan area may have a material adverse effect on our business.***

As of December 31, 2018, approximately 80% of the collateral for the loans in our portfolio consisted of real estate. Substantially all of the collateral is located in the New York metropolitan area. As a result, our financial condition and results of operations may be affected by changes in the economy and the real estate market of the New York metropolitan area, including policy changes enacted by local governments affecting multi-family borrowers, such as rent freezes on rent-stabilized apartments and escalation of real estate taxes. A prolonged period of economic recession or other adverse economic and political conditions in the New York metropolitan area may result in an increase in nonpayment of loans, a decrease in collateral value, and an increase in our ALLL. Although our business and real estate collateral is concentrated in the New York metropolitan area, these same factors apply to our business operations on the West Coast and pose an increasing risk as our business in that region expands.

In addition, our geographic concentration in the New York metropolitan area heightens our exposure to future terrorist attacks or other disasters, which may adversely affect our business and that of our clients and result in a material decrease in our revenues. Future terrorist attacks or other disasters cannot be predicted, and their occurrence can be expected to further negatively affect the U.S. economy generally and specifically the regional market in which we operate.

***As the size of our loan portfolio grows, the risks associated with our loan portfolio may be exacerbated.***

As we grow our business and hire additional banking teams, the size of our loan portfolio grows, which can exacerbate the risks associated with that portfolio. Although we attempt to minimize our credit risk through certain procedures, including stress testing and monitoring the concentration of our loans within specific industries, we cannot assure you that these procedures will remain as effective when the size of our loan portfolio increases. This may result in an increase in charge-offs or underperforming loans, which could adversely affect our business.

***Our failure to effectively manage our credit risk could have a material adverse effect on our financial condition and results of operations.***

There are risks inherent in making any loan, including repayment risks associated with, among other things, the period of time over which the loan may be repaid, changes in economic and industry conditions, dealings with individual borrowers and uncertainties as to the future value of collateral. Although we attempt to minimize our credit risk by monitoring the concentration of our loans within specific industries and through what we believe to be prudent loan application approval procedures, we cannot assure you that such monitoring and approval procedures will reduce these lending risks.

In addition, we are subject to credit risk in our investment portfolio. Our investments include debentures, mortgage-backed securities and collateralized mortgage obligations issued or guaranteed by U.S. government-sponsored enterprises, such as Fannie Mae, Freddie Mac and the Federal Home Loan Banks, as well as collateralized mortgage obligations, bank-collateralized pooled trust preferred securities and other debt securities

issued by private issuers. The issuers of our trust preferred securities include several depositary institutions that suffered significant losses during the economic crisis. While the issuers of our trust preferred securities have stabilized and recapitalized, should the economy weaken, credit risk may affect the value of our holdings, as we are exposed to credit risks associated with the issuers of the debt securities in which we invest. Further, with respect to the mortgage-backed securities in which we invest, we also are affected by the credit risk associated with the borrowers of the loans underlying these securities.

***Lack of seasoning of the mortgage loans underlying our investment portfolio may increase the risk of credit defaults in the future.***

The mortgage loans underlying certain mortgage-backed obligations in which we invest also may not begin to show signs of credit deterioration until they have been outstanding for some period of time. Because the mortgage loans underlying certain of the mortgage-backed obligations in our investment portfolio are relatively new, the level of delinquencies and defaults on such loans may increase in the future, thus adversely affecting the mortgage-backed obligations we hold.

***Our ALLL may not be sufficient to absorb actual losses.***

Experience in the banking industry indicates that a portion of our loans will become delinquent, and that some of these loans may be only partially repaid or may never be repaid at all. Despite our underwriting criteria, we experience losses for reasons beyond our control, including general economic conditions. A prolonged period of economic recession or other adverse economic conditions in the New York metropolitan area may result in an increase in nonpayment of loans, a decrease in collateral value and an increase in our ALLL. Although we believe that our ALLL is maintained at a level adequate to absorb any inherent losses in our loan portfolio, these estimates of loan losses are necessarily subjective and their accuracy depends on the outcome of future events, some of which are beyond our control. We may need to make significant and unanticipated increases in our loss allowances in the future, which would materially adversely affect our financial condition and results of operations.

In addition, bank regulatory agencies, as an integral part of their supervisory functions, periodically review our loan portfolio and related ALLL. These regulatory agencies may require us to increase our provision for loan and lease losses or to recognize further loan charge-offs based upon their judgments, which may be different from ours. In addition, changes to the accounting standards that govern our financial reporting related to our loans may result in unanticipated effects on the timing or amount of our loan losses. An increase in the ALLL required by these regulatory agencies or the unanticipated recognition of losses on our loans could materially adversely affect our financial condition and results of operations. See Risk Factors—" The Financial Accounting Standards Board's recently issued ASU 2016-13 will result in a significant change in how we recognize credit losses and may have a material impact on our financial condition or results of operations."

***We rely on the Federal Home Loan Bank of New York for secondary and contingent liquidity sources.***

We utilize the FHLB of New York for secondary and contingent sources of liquidity. Also, from time to time, we utilize this borrowing source to capitalize on market opportunities to fund investment and loan initiatives. Our FHLB borrowings were approximately $4.97 billion at December 31, 2018. Because we rely on the FHLB for liquidity, if we were unable to borrow from the FHLB, we would need to find alternative sources of liquidity, which may not be available or may be available only at a higher cost and on terms that do not match the structure of our liabilities as well as FHLB borrowings do.

As a member of the FHLB, we are required to purchase capital stock of the FHLB as partial collateral and to pledge marketable securities or loans for our borrowings. At December 31, 2018, we held $264.9 million of FHLB stock. As of December 31, 2018, the Bank had pledged $7.75 billion of commercial real estate loans through a blanket assignment to secure borrowings from the FHLB to meet collateral requirements of $4.91 billion on FHLB borrowings. While not pledged, FHLB held also $658.6 million of securities as of December 31, 2018 as the custodian. These securities can be pledged towards future borrowings, as necessary.

***We are dependent upon key personnel.***

Our success depends to a significant extent upon the performance of certain key executive officers and employees, the loss of any of whom could have a material adverse effect on our business. Our key executive officers and employees include our Chairman, Scott Shay, our President and Chief Executive Officer, Joseph DePaolo, and our Vice-Chairman, John Tamberlane. Although we have entered into agreements with Messrs. Shay and DePaolo, we have not entered into an agreement with Mr. Tamberlane and we generally do not

have employment agreements with our key personnel. We adopted an equity incentive plan and a change of control plan for key personnel in connection with the consummation of our initial public offering. Even though we are party to these agreements and sponsor these plans, we cannot assure you that we will be successful in retaining any of our key executive officers and employees.

Our business is built around group directors, who are principally responsible for our client relationships. A principal component of our strategy is to increase market penetration by recruiting and retaining experienced group directors, their groups, loan officers and other management professionals. Competition for experienced personnel within the commercial banking, specialty finance, brokerage and insurance industries is strong and we may not be successful in attracting and retaining the personnel we require. Our ability to develop new lines of business such as our Fund Banking Division and Signature Public Funding, and our ability to expand into new digital products and new geographic markets, are also dependent on our ability to attract and retain key personnel. We cannot assure you that our recruiting efforts will be successful or that they will enhance our business, results of operations or financial condition.

In addition, our group directors or other key professionals may leave us at any time and for any reason. They are not under contractual restrictions to remain with us and would not be bound by non-competition agreements or non-solicitation agreements if they were to leave us. If a number of our key group directors or other key professionals were to leave, our business could be materially adversely affected. We cannot assure you that such losses will not occur.

Our SBA division is also dependent upon relationships our SBA professionals have developed with clients from whom we purchase loans and upon relationships with investors in pooled securities. The loss of a key member of our SBA division team may lead to the loss of existing clients. We cannot assure you that we will be able to recruit qualified replacements with a comparable level of expertise and relationship base.

***We may not be able to acquire suitable client relationship groups or manage our growth.***

A principal component of our growth strategy is to increase market penetration and product diversification by recruiting group directors and their teams. However, we believe that there is a limited number of potential group directors and teams that will meet our development strategy and other recruiting criteria. As a result, we cannot assure you that we will identify potential group directors and teams that will contribute to our growth. Even if suitable candidates are identified, we cannot assure you that we will be successful in attracting them, as they may opt instead to join our competitors.

Even if we are successful in attracting these group directors and teams, we cannot assure you that they will be successful in bringing additional clients and business to us. Furthermore, the addition of new teams involves several risks including risks relating to the quality of the book of business that may be contributed, adverse personnel relations and loss of clients because of a change of institutional identity. In addition, the process of integrating new teams could divert management time and resources from attention to existing clients. We or such directors or teams also may face litigation in some instances brought by former employers of these individuals relating to their separation from the former employer. We cannot assure you that we will be able to successfully integrate any new team that we may acquire or that any new team that we acquire will enhance our business, results of operations, cash flows or financial condition.

***Provisions in our charter documents may delay or prevent our acquisition by a third party.***

Our restated Certificate of Organization (as amended) and By-laws (as amended) contain provisions that may make it more difficult for a third party to acquire control of us without the approval of our Board of Directors. For example, our By-laws contain provisions that separate our Board of Directors into three separate classes with staggered terms of office and provisions that restrict the ability of shareholders to take action without a meeting. These provisions could delay, prevent or deter a merger, acquisition, tender offer, proxy contest or other transaction that might otherwise result in our stockholders receiving a premium over the market price for their common stock.

***There are substantial regulatory limitations on changes in control of the Bank.***

Federal law prohibits a company or a group of persons deemed to be “acting in concert” from, directly or indirectly, acquiring 25% or more (5% if the acquirer is a bank holding company) of any class of our voting stock or obtaining the ability to control in any manner the election of a majority of our directors or otherwise to direct the management or policies of our company without prior application to and the approval of the Board of Governors of the Federal

Reserve System. Moreover, any individual or group of individuals or entities deemed to be acting in concert who acquires 10% or more of our voting stock or otherwise obtains control over Signature Bank would be required to file a notice with the FDIC under the Change in Bank Control Act and to receive a non-objection to such acquisition of control. Finally, any person or group of persons deemed to be acting in concert would be required to obtain approval of the DFS before acquiring 10% or more of our voting stock. See "Regulation and Supervision—Change in Control." Accordingly, prospective investors need to be aware of and comply with these requirements, if applicable, in connection with any purchase of shares of our common stock. This may effectively reduce the number of investors who might be interested in investing in our stock and also limits the ability of investors to purchase us or cause a change in control.

***Curtailment of government guaranteed loan programs could affect our SBA business.***

Our SBA business relies on the purchasing, pooling and selling of government guaranteed loans, in particular those guaranteed by the SBA. From time to time, the government agencies that guarantee these loans reach their internal limits and cease to guarantee loans for a period of time. In addition, these agencies may change their rules for loans or Congress may adopt legislation that would have the effect of discontinuing or changing the programs. If changes to the SBA program occur, the volumes of loans that qualify for government guarantees could decline. Levels of activity may also be impacted by temporary government shutdowns. Lower volumes of origination of government guaranteed loans may reduce the profitability of our SBA business.

***We use brokered deposits to fund a portion of our activities and the loss of our ability to accept or renew brokered deposits could have an adverse effect on us.***

We use brokered deposits to fund a portion of our activities. At December 31, 2018, $748.6 million, or 2.1% of our total deposit account balances consisted of brokered deposits, a decrease of $95.0 million or 11.3% when compared to $843.6 million at the end of the prior year. Acceptance or renewal of "brokered deposits" is regulated by the FDIC. If we do not maintain our regulatory capital above the level required to be "well-capitalized," then we will be limited in our ability to accept or renew deposits classified as brokered deposits unless we obtain a waiver from the FDIC and are at least "adequately" capitalized. In December 2018, the FDIC published an advanced notice of proposed rulemaking soliciting public comment on its regulation of brokered deposits in light of certain changes in the provision of banking services and technological advancements that have occurred since the imposition of statutory restrictions on banks' acceptance of brokered deposits. We cannot, however, predict the timing or outcome of any regulatory initiative to update or modify the existing regulations governing brokered deposits. See "Regulation and Supervision—Other Regulatory Requirements." If we are no longer able to accept or renew brokered deposits, we will need to replace that funding or reduce our assets.

***We rely extensively on outsourcing to provide cost-effective operational support.***

We make extensive use of outsourcing to provide cost-effective operational support with service levels consistent with large bank operations, including key banking, brokerage and insurance systems. For example, under the clearing agreement Signature Securities has entered into with National Financial Services, LLC (a Fidelity Investments company), National Financial Services, LLC processes all securities transactions for the account of Signature Securities and the accounts of its clients. Services of the clearing firm include billing and credit extension and control, receipt, custody and delivery of securities. Signature Securities is dependent on the ability of its clearing firm to process securities transactions in an orderly fashion. In addition, Fidelity Information Services provides us with all our core banking applications. Our outsourcing agreements can generally be terminated by either party upon notice. Although we maintain contingency plans for the transitioning of outsourced activities to other third parties, the termination of some of our outsourcing agreements, including the agreements with National Financial Services, LLC and Fidelity Information Services, could result in a disruption of service that could, even if temporary, have a material adverse effect on our financial condition and results of operations.

Our third-party outsourcing relationships are subject to evolving regulatory requirements regarding vendor management. Federal banking guidance requires us to conduct due diligence and oversight in third party business relationships and to control risks in the relationship to the same extent as if the activity were directly performed by the Bank. In July 2016, the FDIC proposed new Guidance for Third Party Lending to set forth safety and soundness and consumer compliance measures FDIC-supervised institutions should follow when lending through a business relationship with a third party. In June 2017, the FDIC adopted supervisory guidance on model risk management which builds upon previously-issued risk management guidance and requires us to, among other things, validate third-party vendors and products in a manner consistent with FDIC supervisory expectations and our internal risk management protocols. If our regulators conclude that we are not exercising proper oversight and

control over third-party vendors, or that third parties are not performing their services appropriately, then we may be subject to enhanced supervisory scrutiny or enforcement actions. These regulatory changes or enforcement actions could result in additional costs and a material adverse effect on our business and our ability to use third party services to receive cost-effective operational support.

***We are subject to various legal claims and litigation.***

From time to time, customers, employees and others that we do business with make claims and take legal action against us for various occurrences, including the performance of our fiduciary responsibilities. The outcome of these cases is uncertain. Regardless of whether these claims and legal actions are founded or unfounded, if such claims and legal actions are not resolved in a timely manner favorable to us, they may result in significant financial liability and/or adversely affect the market perception of us and our products and services, as well as impact customer demand for our products and services. Any financial liability or reputational damage may adversely affect our future financial condition and results of operations. Even if these claims and legal actions do not result in a financial liability or reputational damage, defending these claims and actions have resulted in, and will continue to result in, increased legal and professional services costs, which may be material in amount.

***Our management of the risk of system failures or breaches of our network security is increasingly subject to regulation and could subject us to increased operating costs, as well as litigation and other liabilities.***

The computer systems and network infrastructure we use could be vulnerable to unforeseen problems and cybersecurity threats. Our operations are dependent upon our ability to protect our computer equipment against damage from fire, power loss, telecommunications failure or other similar catastrophic events. Any damage or failure that causes an interruption in our operations could have a material adverse effect on our financial condition and results of operations. In addition, our operations are dependent upon our ability to protect our computer systems and network infrastructure against damage from physical break-ins, security breaches, hackers, viruses and other malware and other disruptive problems, including through coordinated attacks sponsored by foreign nations and criminal organizations to disrupt business operations and other compromises to data and systems for political or criminal purposes. Such computer break-ins, whether physical or electronic, and other disruptions could jeopardize the security of information stored in and transmitted through our computer systems and network infrastructure, which may result in significant liability to us and deter potential clients. Our cybersecurity procedures are increasingly subject to regulations administered and enforced by our regulators, which could result in elevated liability from these disruptions. See “Regulation and Supervision—Financial Privacy and Cybersecurity.”

Although we, with the help of third-party service providers, have implemented and intend to continue to implement and enhance security technology and establish operational procedures to prevent such damage, there can be no assurance that these security measures will be successful in deterring or mitigating the effects of every cyber-threat that we face. In addition, advances in computer capabilities, new discoveries in the field of cryptography or other developments could result in a compromise or breach of the algorithms we and our third-party service providers use to protect client transaction data, other customer data and employee data. Any cyber-attack or other security breach involving the misappropriation, loss or other unauthorized disclosure of confidential customer or employee information could severely damage our reputation, erode confidence in the security of our systems, products and services, expose us to the risk of litigation and liability, disrupt our operations and have a material adverse effect on our business.

We carry specific cyber-insurance coverage, which would apply in the event of various breach scenarios, but the amount of coverage may not be adequate in any particular case. In addition, cyber-threat scenarios are inherently difficult to predict and can take many forms, some of which may not be covered under our cyber insurance coverage. Furthermore, the occurrence of a cyber-threat scenario could cause interruptions in our operations and result in the incurrence of significant costs, including those related to forensic analysis and legal counsel, each of which may be required to ascertain the extent of any potential harm to our customers, or employees, or damage to our information systems and any legal or regulatory obligations that may result therefrom. The occurrence of a cyber-threat may therefore have a material adverse effect on our financial condition and results of operations. Risks and exposures related to cybersecurity attacks are expected to remain high for the foreseeable future due to the rapidly evolving nature and sophistication of these threats, as well as due to the expanding use of Internet banking, mobile banking and other technology-based products and services by us and our clients. The Bank has significantly increased efforts to educate employees and clients on the topic. Clients can also be sources of cybersecurity risk to the Bank, particularly when their activities and systems are beyond the Bank’s own security and control systems. Although we expect that, where cybersecurity incidents are due to client failure to maintain

the security of their own systems and processes, clients will generally be responsible for losses incurred, there can be no assurance that our relationship with the affected client (and other clients) will not be adversely affected.

***We are subject to laws regarding the privacy, information security and protection of personal information and any violation of these laws or an incident involving personal, confidential or proprietary information of individuals could damage our reputation and otherwise adversely affect our operations and financial condition.***

Our business requires the collection and retention of large volumes of customer data, including personally identifiable information in various information systems that we maintain and in those maintained by third parties with whom we contract to provide data services. We also collect data regarding our employees, suppliers and other third-parties. We are subject to complex and evolving laws and regulations governing the privacy and protection of personal information of individuals (including customers, employees, suppliers and other third parties). For example, our business is subject to laws and regulations which, among other things: (i) impose certain limitations on our ability to share nonpublic personal information about our customers with nonaffiliated third parties; (ii) require that we provide certain disclosures to customers about our information collection, sharing and security practices and afford customers the right to "opt out" of any information sharing by us with nonaffiliated third parties (with certain exceptions); and (iii) require that we develop, implement and maintain a written comprehensive information security program containing appropriate safeguards based on our size and complexity, the nature and scope of our activities, and the sensitivity of customer information we process, as well as plans for responding to data security breaches. Various state and federal banking regulators and states, have also enacted data security breach notification requirements with varying levels of individual, consumer, regulatory or law enforcement notification in certain circumstances in the event of a security breach. Ensuring that our collection, use, transfer and storage of personal information complies with all applicable laws and regulations can increase our costs. Furthermore, we may not be able to ensure that all of our customers, suppliers, counterparties and other third parties have appropriate controls in place to protect the confidentiality of the information that they exchange with us, particularly where such information is transmitted by electronic means. If personal, confidential or proprietary information of customers or others were to be mishandled or misused, we could be exposed to litigation or regulatory sanctions under personal information laws and regulations. Concerns regarding the effectiveness of our measures to safeguard personal information, or even the perception that such measures are inadequate, could cause us to lose customers or potential customers for our products and services and thereby reduce our revenues. Accordingly, any failure or perceived failure to comply with applicable privacy or data protection laws and regulations may subject us to inquiries, examinations and investigations that could result in requirements to modify or cease certain operations or practices or in significant liabilities, fines or penalties, and could damage our reputation and otherwise adversely affect our operations and financial condition. Moreover, compliance with applicable regulations and mandates could add significantly to our operating expenses.

***Decreases in trading volumes or prices could harm the business and profitability of Signature Securities.***

Declines in the volume of securities trading and in market liquidity generally result in lower revenues from our brokerage and related activities. The profitability of our Signature Securities business would be adversely affected by a decline in revenues because a significant portion of its costs are fixed. For these reasons, decreases in trading volume or securities prices could have a material adverse effect on our business, financial condition and results of operations.

***Our ability to pay cash dividends or engaging in share repurchases is restricted.***

On July 18, 2018, the Bank declared its inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018 to our common shareholders of record at the close of business on August 1, 2018. The Bank declared its second cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on November 15, 2018 to common shareholders of record at the close of business on November 1, 2018. On January 17, 2019, the Bank declared its third cash dividend of $0.56 per share, or a total of $30.8 million, which was paid on February 15, 2019 to common shareholders of record at the close of business on February 1, 2019.

In addition, on October 17, 2018, Bank stockholders approved our common stock repurchase program which provides the Bank the ability to repurchase common stock from shareholders in the open market up to $500 million. Payments of dividends will be subject to the prior approval by the FDIC if, after having paid a dividend we would be undercapitalized, significantly undercapitalized or critically undercapitalized, and by the DFS under

certain conditions. Share buybacks are also subject to shareholder and regulatory approval, which were received for the repurchase program of up to $500 million in October and November 2018, respectively. Our ability to pay dividends and to buy back shares will also depend upon the amount of cash available to us from our subsidiaries. Restrictions on our subsidiaries' ability to make dividends or advances to us will tend to limit our ability to pay dividends to our shareholders. See "Regulation and Supervision—Restrictions on Dividends and Other Distributions."

***We may be responsible for environmental claims.***

There is a risk that hazardous or toxic waste could be found on the properties that secure our loans. In such event, we could be held responsible for the cost of cleaning up or removing such waste, and such cost could significantly exceed the value of the underlying properties and adversely affect our profitability. Additionally, even if we are not held responsible for these cleanup and removal costs, the value of the collateralized property could be significantly lower than originally projected, thus adversely affecting the value of our security interest. Although we have policies and procedures that require us to perform environmental due diligence prior to accepting a property as collateral and an environmental review before initiating any foreclosure action on real property, there can be no assurance that this will be sufficient to protect us from all potential environmental liabilities associated with collateralized properties.

***Climate change and related legislative and regulatory initiatives may result in operational changes and expenditures that could significantly impact our business.***

The current and anticipated effects of climate change are creating an increasing level of concern for the state of the global environment. As a result, political and social attention to the issue of climate change has increased. In recent years, governments across the world have entered into international agreements to attempt to reduce global temperatures, in part by limiting greenhouse gas emissions. Although the United States government has announced its plans to withdraw from the Paris Agreement, the most recent international climate change accord, the U.S. Congress, state legislatures and federal and state regulatory agencies have continued to propose and advance numerous legislative and regulatory initiatives seeking to mitigate the effects of climate change. These agreements and measures may result in the imposition of taxes and fees, the required purchase of emission credits, and the implementation of significant operational changes, each of which may require us to expend significant capital and incur compliance, operating, maintenance and remediation costs. Given the lack of empirical data on the credit and other financial risks posed by climate change, it is impossible to predict how climate change may impact our financial condition and operations; however, as a banking organization, the physical effects of climate change may present certain unique risks. For example, weather disasters, shifts in local climates and other disruptions related to climate change may adversely affect the value of real properties securing our loans, which could diminish the value of our loan portfolio. Such events may also cause reductions in regional and local economic activity that may have an adverse effect on our customers, which could limit our ability to raise and invest capital in these areas and communities, each of which could have a material adverse effect on our financial condition and results of operations.

***Downgrades of our credit rating could negatively affect our funding and liquidity by reducing our funding capacity and increasing our funding costs.***

Kroll Bond Rating Agency ("KBRA"), a full-service rating agency, provides us with deposit and debt ratings which evaluate liquidity, asset quality, capital adequacy and earnings. KBRA continuously evaluates these ratings based on a number of factors, including standalone financial strength, as well as factors not entirely within our control, such as KBRA's proprietary rating methodology and assumptions and conditions affecting the financial services industry and markets generally. We may not be able to maintain our current ratings. Downgrades of our deposit and debt ratings could negatively impact our ability to access the capital markets and other sources of funds as well as the costs of those funds, and our ability to maintain certain deposits. This could affect our growth, profitability, and financial condition, including our liquidity.

***We may not be able to raise the additional funding needed for our operations.***

If we are unable to generate profits and cash flow on a consistent basis, we may need to arrange for additional financing to support our business. Although we have completed a number of successful capital raising transactions, including our 2016 issuance of $260.0 million aggregate principal amount of Variable Rate Subordinated Notes, our 2016 public offering of 2,366,855 shares of our common stock and our 2014 public

offering of 2,415,000 shares of our common stock, we cannot assure you that, if needed or desired, we would be able to obtain additional capital or financing on commercially reasonable terms or at all. Our failure to obtain sufficient capital or financing could have a material adverse effect on our growth, on our ability to compete effectively and on our financial condition and results of operations.

***Inflation or deflation could adversely affect our business and financial results.***

Inflation can adversely affect us by increasing costs of capital and labor and reducing the purchasing power of our cash resources. In addition, inflation is often accompanied by higher interest rates, which may negatively affect the market value of securities in our investment portfolio. Current or future efforts by the government to stimulate the economy may increase the risk of significant inflation and its adverse impact on our financial condition and results of operations.

Alternatively, a significant period of deflation could cause a decrease in overall spending and borrowing levels. This could lead to a further deterioration in economic conditions, including an increase in the rate of unemployment and under-employment. Deflation is often accompanied by lower interest rates, which may lower the rate of interest we earn on our loans and may have a material adverse effect on our net interest income and earnings. Renewed declines in oil and gas prices could increase the risk of significant deflation, which would have an adverse effect on our financial condition and results of operations.

***The misconduct of employees or their failure to abide by regulatory requirements is difficult to detect and deter.***

Employee misconduct could subject us to financial losses or regulatory sanctions and seriously harm our reputation. It is not always possible to deter employee misconduct, and the precautions we take to prevent and detect this activity may not be effective in all cases. Misconduct by our employees could include hiding unauthorized activities from us, improper or unauthorized activities on behalf of clients or improper use of confidential information.

Employee errors in recording or executing transactions for clients could cause us to enter into transactions that clients may disavow and refuse to settle. These transactions expose us to risks of loss, which can be material, until we detect the errors in question and unwind or reverse the transactions. As with any unsettled transaction, adverse movements in the prices of the securities involved in these transactions before we unwind or reverse them can increase these risks.

All of our securities professionals are required by law to be licensed with our subsidiary, Signature Securities, a licensed securities broker-dealer. Under these requirements, these securities professionals are subject to our supervision in the area of compliance with federal and applicable state securities laws, rules and regulations, as well as the rules and regulations of self-regulatory organizations such as FINRA. See “Regulation and Supervision—Regulation of Signature Securities.” The violation of any regulatory requirements by us or our securities professionals could jeopardize Signature Securities’ broker-dealer license or other licenses and could subject us to liability to clients.

***We depend upon the accuracy and completeness of information about clients and other third parties and are subject to losses resulting from fraudulent or negligent acts on the part of our clients or other third parties.***

We rely heavily upon information supplied by our clients and by third parties, including the information included in loan applications, property appraisals, title information and employment and income documentation, in deciding whether to extend credit or enter into other transactions with clients, as well as the terms of the credit. If any of the information upon which we rely is misrepresented, either fraudulently or inadvertently, and the misrepresentation is not detected prior to loan funding, the value of the loan may be significantly lower than we had expected, or we may fund a loan that we would not have funded or on terms that we would not have extended. Whether a misrepresentation is made by the loan applicant, a mortgage broker or another third party, we generally bear the risk of loss associated with the misrepresentation. A loan subject to a material misrepresentation is typically unable to be sold or subject to repurchase if sold prior to the detection of the misrepresentation. The sources of the misrepresentation are often difficult to locate and it is often difficult to recover any of the monetary losses we have suffered. Although we maintain a system of internal controls to mitigate against such occurrences and maintain insurance coverage for such risks that are insurable, we cannot assure you that we have detected or will detect all misrepresented information in our loan origination operations.

If the credit is extended to a business, we may rely on representations of clients as to the accuracy and completeness of that information and, with respect to financial statements, on reports of independent auditors. We may assume that the client's audited financial statements conform with generally accepted accounting principles and present fairly, in all material respects, the financial condition, results of operations and cash flows of the customer. In addition, we may also rely on the audit report covering those financial statements. Our financial condition and results of operations could be negatively impacted to the extent we rely on financial statements that do not comply with generally accepted accounting principles or that are materially misleading.

***The failure of our brokerage clients to meet their margin requirements may cause us to incur significant liabilities.***

The brokerage business of Signature Securities, by its nature, is subject to risks related to potential defaults by our clients in paying for securities they have agreed to purchase and for securities they have agreed to sell and deliver. National Financial Services, LLC provides clearing services to our brokerage business, including the confirmation, receipt, execution, settlement, and delivery functions involved in securities transactions, as well as the safekeeping of clients' securities and assets and certain client record keeping, data processing, and reporting functions. National Financial Services, LLC makes margin loans to our clients to purchase securities with funds they borrow from National Financial Services, LLC. We must indemnify National Financial Services, LLC for, among other things, any loss or expense incurred due to defaults by our clients in failing to repay margin loans or to maintain adequate collateral for those loans. Although we may employ certain mitigating tactics that could limit the extent of our loss exposure, we are nevertheless subject to the risks that are inherent in extending margin credit, especially during periods of rapidly declining markets.

***Our business may be adversely impacted by severe weather, acts of war or terrorism, public health issues and other external events.***

Our primary markets are located near coastal waters, which could generate naturally occurring severe weather that could have a significant impact on our business. In addition, New York City remains a central target for potential civil unrest, acts of war or terrorism against the United States and other acts of violence or threats to national security and our operations and the operations of our vendors, suppliers and clients may be subject to disruption from a variety of causes, including work stoppages, financial difficulties, fire, earthquakes, flooding or other natural disasters. Moreover, a public health issue such as a major epidemic or pandemic could adversely affect economic conditions. The United States and other countries have experienced, and may experience in the future, outbreaks of contagious diseases that affect public perception of health risk. In the event of a widespread, prolonged, actual or perceived outbreak of a contagious disease, our operations could be negatively impacted by a reduction in customer traffic, quarantines or closures of our offices and facilities, the decline in productivity of our key officers and employees or other factors. Such events could have a significant impact on our ability to conduct our business and could affect the ability of our borrowers to repay their loans, impair the value of the collateral securing our loans, and cause significant property damage, thus increasing our expenses and/or reducing our revenues. In addition, such events could affect the ability of our depositors to maintain their deposits with us, and adverse consequences may also result from corresponding disruption in the operations of our vendors, suppliers and clients, which could have a material effect upon our business. Although we have established disaster recovery policies and procedures, the occurrence of any such event could have a material adverse effect on our business which, in turn, could have a material adverse effect on our financial condition and results of operations.

***Changes in the federal, state or local tax laws may negatively impact our financial performance.***

We are subject to changes in tax law that could increase our effective tax rates. These law changes may be retroactive to previous periods and as a result could negatively affect our current and future financial performance. The short-and long-term impact of the TCJA on the economic conditions in the markets in which we operate, and in the United States as a whole, is 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. Similarly, the Bank's customers are likely to experience varying effects from both the individual and business tax provisions of the TCJA and such effects, whether positive or negative, may have a corresponding impact on our business.

***The Financial Accounting Standards Board's recently issued ASU 2016-13 will result in a significant change in how we recognize credit losses and may have a material impact on our financial condition or results of operations.***

In June 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-13, "*Financial Instruments-Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments*," which will replace the current "incurred loss" model for recognizing credit losses with an "expected loss" model referred to as the Current Expected Credit Loss ("CECL") model. The new CECL standard will be mandatory for fiscal years beginning after December 15, 2019 and for interim periods within those fiscal years. Under the CECL model, we will be required to present certain financial assets carried at amortized cost, such as loans held for investment and held-to-maturity debt securities, at the net amount expected to be collected. This differs significantly from the "incurred loss" model required under current GAAP, which delays recognition until it is probable a loss has been incurred. Accordingly, we expect that the adoption of the CECL model will significantly affect how we determine our allowance for loan and lease losses and could require us to significantly increase our allowance. Moreover, the CECL model may create more volatility in the level of our allowance for loan and lease losses.

On December 21, 2018, the regulatory agencies approved a final rule modifying their regulatory capital rules and providing an option to phase in over a period of three years the day-one regulatory capital effects of the CECL model. The final rule also revises the agencies' other rules to reflect the update to the accounting standards. The final rule will take effect April 1, 2019. We are currently evaluating the impact the CECL model will have on our accounting, but we expect to recognize a one-time cumulative-effect adjustment to our allowance for loan and lease losses as of the beginning of the first reporting period in which we adopt the new standard, consistent with regulatory expectations set forth in interagency guidance issued at the end of 2016. We also expect to incur both transition costs and ongoing costs in developing and implementing the CECL methodology, and that the methodology will result in increased capital costs upon initial adoption as well as over time. While we have made extensive progress on the implementation of the standard, we cannot yet determine the magnitude of any such one-time cumulative adjustment or of the overall impact of the new standard on our financial condition or results of operations, but any requirement to materially increase our level of allowance for loan and lease losses for any reason could adversely affect our business, financial condition and results of operations.

***Other changes in accounting standards or interpretation in new or existing standards could materially affect our financial results.***

From time to time the FASB and the SEC change accounting regulations and reporting standards that govern our preparation of financial statements, and bank regulators often provide supervisory views and guidance regarding the implementation of these standards. In addition, the FASB, SEC and the bank regulators may revise their previous interpretations regarding existing accounting regulations and the application of these accounting standards. These changes in accounting regulations and reporting standards and revisions in accounting interpretations are out of our control and may have a material impact on our financial statements.

***Negative public opinion could damage our reputation and adversely affect our earnings.***

Reputational risk, or the risk to our earnings and capital from negative public opinion, is inherent in our business. Negative public opinion can result from the actual or perceived manner in which we conduct our business activities; our management of actual or potential conflicts of interest and ethical issues; and our protection of confidential client information. Our brand and reputation may also be harmed by actions taken by third parties that we contract with to provide services to the extent such parties fail to meet their contractual, legal and regulatory obligations or act in a manner that is harmful to our clients. If we fail to supervise these relationships effectively, we could also be subject to regulatory enforcement, including fines and penalties. Negative public opinion can adversely affect our ability to keep and attract clients and can expose us to litigation and regulatory action. We take steps to minimize reputation risk in the way we conduct our business activities and deal with our clients, communities and vendors but our efforts may not be sufficient.

### Risks Related to Our Industry

***We are subject to stringent regulatory capital requirements, which may adversely impact our return on equity, require us to raise additional capital, or constrain us from obtaining deposits, paying dividends or repurchasing shares.***

As a state-chartered bank, we are subject to various regulatory capital requirements administered by state and federal regulatory agencies. Failure to meet minimum capital requirements can initiate certain mandatory—and possible additional discretionary—actions by regulators that, if undertaken, could have a direct material adverse effect on our financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, we must meet specific capital guidelines that involve quantitative measures of our assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. Our capital amounts and classifications are also subject to qualitative judgments by the regulators about components, risk weightings and other factors.

Signature Bank is subject to regulatory risk-based capital rules imposed by the FDIC. The FDIC's rules implement the "Basel III" regulatory capital reforms and changes required by the Dodd-Frank Act. The FDIC rules include risk-based capital and leverage ratios and refine the definition of what constitutes "capital" for purposes of calculating those ratios. The initial minimum capital-level requirements, which were phased-in over a multi-year period, included the following: (i) a common equity Tier 1 risk-based capital ratio of 4.5%; (ii) an increase in the Tier 1 risk-based capital ratio minimum requirement from 4.0% to 6.0%; and (iii) a Tier 1 leverage ratio minimum requirement of 4.0%. The capital rules also establish a "capital conservation buffer" of 2.5% above the regulatory minimum capital requirements. The capital rules became fully implemented for all financial institutions on January 1, 2019, resulting in the following effective minimum ratios: (i) a common equity Tier 1 capital ratio (plus capital conservation buffer) of 7.0%, (ii) a Tier 1 capital ratio (plus capital conservation buffer) of 8.5%, and (iii) a total capital ratio (plus capital conservation buffer) of 10.5%. An institution will be subject to limitations on paying dividends, engaging in share repurchases and paying discretionary bonuses if its capital levels fall below the buffer amount. See "Regulation and Supervision—Capital and Related Requirements."

The application of more stringent capital requirements for Signature Bank could result in, among other things, lower returns on equity, requirements to raise additional capital, and regulatory actions such as limitations on our ability to pay dividends or repurchase shares, if we were to be unable to comply with such requirements. The impact of these requirements could also change the competitive landscape in which we seek deposits, lending opportunities, clients, and banking professionals and otherwise conduct our business.

In addition, we are subject to FDIC regulations that impose a system of mandatory and discretionary supervisory actions that become more severe as our capital levels decline. The regulations include five capital categories ranging from "well capitalized" to "critically undercapitalized." Such classifications are used by the FDIC to determine our deposit insurance premium and ability to accept brokered deposits and affect the approval of our applications to increase our asset size or otherwise expand our business activities or acquire other institutions.

To be categorized as "well capitalized" under the Act and, thus, subject to the fewest restrictions, we must (i) have a total risk-based capital ratio of 10.0% or greater; (ii) have a Tier 1 risk-based capital ratio of 8.0% or greater; (iii) have a common equity Tier 1 risk-based capital ratio of 6.5% or greater; (iv) have a leverage ratio of 5.0% or greater; and (v) not be subject to any written agreement, order, capital directive or prompt corrective action directive issued by the FDIC to meet and maintain a specific capital level. These capital requirements may limit our asset growth opportunities and restrict our ability to increase earnings.

Our failure to comply with our minimum capital requirements would have a material adverse effect on our financial condition and results of operations. See "Regulation and Supervision—Prompt Corrective Action and Enforcement Powers."

***FDIC insurance premiums fluctuate materially, which could negatively affect our profitability.***

The FDIC insures deposit accounts at certain financial institutions, including Signature Bank. Under FDIC regulations, we are required to pay premiums to the Deposit Insurance Fund ("DIF") to maintain our deposit accounts' required insurance. After the passage of the Dodd-Frank Act, the FDIC adopted new rules that redefined how deposit insurance assessments are calculated. The FDIC utilizes a risk-based premium system in which an institution pays premiums for deposit insurance on the institution's average consolidated total assets minus average tangible equity. For large insured depository institutions, generally defined as those with at least $10 billion in total assets, the assessment rate schedules combine regulatory ratings, PCA capital evaluations, and

financial measures into two scorecards, one for most large insured depository institutions and another for highly complex insured depository institutions, to calculate assessment rates. A highly complex institution is generally defined as an insured depository institution with more than $50 billion in total assets that is controlled by a parent company with more than $500 billion in total assets. Because of our size and organizational structure, Signature Bank is not viewed as "highly complex' and is not likely to be viewed as such in the near future. The assessment rate schedule includes an adjustment for significant amounts of brokered deposits applicable to large institutions that are either less than well capitalized or have a composite rating of "3," "4," or "5" under the Uniform Financial Institution Rating System. For such an institution, an assessment rate adjustment applies when its ratio of brokered deposits to domestic deposits is greater than 10%. If our regulatory ratings, PCA capital evaluations, financial measures, or levels of brokered deposits change in ways that indicate greater risk, our deposit insurance assessments could increase materially.

In March 2016, the FDIC adopted a final rule on deposit insurance assessment rates for large and small insured depository institutions, which took effect on June 30, 2016. The final rule imposes a surcharge on banks with at least $10 billion in total assets at an annual rate of four and one-half basis points applied to the institution's assessment base (with certain adjustments) in order to reach a DIF reserve ratio of 1.35% (which occurred as of September 30, 2018, thus saving the Bank approximately $3.5 million per quarter prospectively). In total, recent changes to the FDIC's assessments decreased our deposit insurance assessments by $1.7 million in 2018 compared to 2017. See "Regulation and Supervision—Deposit Premiums and Assessments." Any further increase in assessment fees, whether due to the FDIC's assessment of our risk level, additional regulatory changes, or increases in our assessment base, could have a materially adverse effect on our results of operations and financial condition.

***We are subject to significant government regulation.***

We operate in a highly-regulated environment and are subject to supervision and regulation by a number of governmental regulatory agencies, including, among others, the FDIC, the DFS, the Federal Reserve, the CFPB, the SEC and FINRA. In addition, we may be subject to inquiries or investigations conducted by the U.S. Department of Justice or State Attorneys General, either in connection with referrals made by our regulators or on an independent basis. As we expand our operations, we will become subject to regulation by additional states. Regulations adopted by our banking regulators are generally intended to provide protection for our depositors and our clients, rather than our shareholders, and govern a comprehensive range of matters relating to ownership and control of our shares, our acquisition of other companies and businesses, the activities in which we are permitted to engage, maintenance of adequate capital levels, and other aspects of our operations.

These regulatory agencies possess broad authority to prevent or remedy unsafe or unsound practices or violations of law. For example, bank regulators view certain types of clients as "high risk" clients under the Bank Secrecy Act, and other laws and regulations, and require enhanced due diligence and enhanced monitoring with respect to such clients. While we believe that we adequately perform such enhanced due diligence and monitoring with respect to our clients that fall within this category, if the regulators believe that our efforts are not adequate or that we have failed to identify suspicious transactions in such accounts, they could bring an enforcement action against us, which could result in bad publicity, fines and other penalties, and could have a material adverse effect on our business.

In addition, laws and regulations enacted over the last several years have had, and are expected to continue to have, a significant impact on the financial services industry. Some of these laws and regulations, including the Dodd-Frank Act, the Sarbanes-Oxley Act of 2002 and the USA PATRIOT Act of 2001, have increased and may in the future further increase our costs of doing business, particularly personnel and technology expenses necessary to maintain compliance with the expanded regulatory requirements.

The securities markets and the brokerage industry in which Signature Securities operates are also highly regulated. Signature Securities is subject to regulation as a securities broker and investment adviser, and many of the regulations applicable to Signature Securities may have the effect of limiting its activities, including activities that might be profitable. Signature Securities is registered with and subject to supervision by the SEC and FINRA and is also subject to state insurance regulation. As a subsidiary of Signature Bank, Signature Securities is also subject to regulation and supervision by the DFS. See "Regulation and Supervision—Regulation of Signature Securities." The securities industry has been subject to several fundamental regulatory changes, including changes in the rules of self-regulatory organizations such as the NYSE and FINRA. In the future, the industry may become subject to new regulations or changes in the interpretation or enforcement of existing regulations. We cannot predict the extent to which any future regulatory changes may adversely affect our business.

In addition, we are subject to ongoing examination by the FDIC, the DFS, the SEC, the CFPB, self-regulatory organizations and various state authorities. Our banking operations, sales practices, trading operations, record-keeping, supervisory procedures and financial position may be reviewed during such examinations to determine if they comply with the rules and regulations designed to protect clients and protect the solvency of banks and broker-dealers. Examinations may result in the issuance of a letter to us noting perceived deficiencies and requesting us to take corrective action. Deficiencies discovered through examination, customer complaints, or other means could lead to further investigation and the possible institution of administrative proceedings, which may result in the issuance of an order imposing sanctions upon us and/or our personnel, including our investment professionals. For example, the enforcement of fair lending laws has been an increasing area of focus for regulators, including the FDIC and the CFPB, and an examination or customer complaint could lead to an enforcement action in this area. See "Regulation and Supervision—Community Reinvestment Act and Fair Lending."

Significantly, on May 24, 2018, the President signed into law the Economic Growth, Regulatory Relief, and Consumer Protection Act ("Economic Growth Act"), which repealed or modified several important provisions of the Dodd-Frank Act. Among other things, the Economic Growth Act raises the total asset thresholds to $250 billion for Dodd-Frank Act annual company-run stress testing, leverage limits, liquidity requirements, and resolution planning requirements for bank holding companies, subject to the ability of the Federal Reserve to apply such requirements to institutions with assets of $100 billion or more to address financial stability risks or safety and soundness concerns. In addition new agency leadership are considering several proposals to modify existing regulations. Accordingly, the effect of banking legislation and regulations remains uncertain. The implementation, amendment, or repeal of federal banking laws or regulations may affect the banking industry as a whole, including our business and results of operations, in ways that are difficult to predict. See Risk Factors—"The recently enacted Economic Growth Act did not eliminate many of the aspects of the Dodd Frank Act that have increased our compliance costs, and remains subject to further rulemaking."

General regulatory sanctions that regulators may seek against a bank may include a censure, cease and desist order, monetary penalties or an order suspending us for a period of time from conducting certain or all of our operations. Sanctions against individuals may include a censure, cease and desist order, monetary penalties or an order restricting the individual's activities or suspending the individual from association with us. In egregious cases, either we, our personnel, or both, could be expelled from a self-regulatory organization or barred from the banking industry or the securities industry, among other penalties.

***The Dodd-Frank Act may continue to affect our results of operations, financial condition or liquidity.***

The Dodd-Frank Act, signed into law in 2010, made extensive changes to the laws regulating financial services firms. The Dodd-Frank Act also required significant rulemaking and mandates multiple studies that have resulted and may continue to result in additional legislative and regulatory actions that will affect the operations of the Bank.

Under the Dodd-Frank Act, federal banking agencies were required to draft and implement enhanced supervision, examination, and capital and liquidity standards for depository institutions. The enhanced requirements include changes to capital, leverage and liquidity standards and numerous other requirements. The Dodd-Frank Act also established the CFPB, and gave it broad authority, and permits states to adopt stricter consumer protection laws and enforce consumer protection rules issued by the CFPB.

In December 2013, federal regulators adopted a final rule implementing the "Volcker Rule" enacted as part of the Dodd-Frank Act. The Volcker Rule prohibits (subject to certain exceptions) banks and their affiliates from engaging in short-term proprietary trading in securities and derivatives and from investing in and sponsoring certain unregistered investment companies (including not only such things as hedge funds, commodity pools and private equity funds, but also a range of asset securitization structures that do not meet exemptive criteria in the final rules). Banks were required to conform their activities and investments to the final regulations' requirements by July 2015, but the Federal Reserve has exercised its authority to extend the divestiture period for pre-2014 investments to July 21, 2017. The Bank had limited activities that were impacted by the Volcker Rule, and the only prohibited activity related to our holding of certain AFS securities in investment vehicles that met the definition of Covered Funds. These Covered Funds securities were either divested by the divestiture deadline in July 2017 or shortly thereafter with the exception of one private CMO re-REMIC security which was written off in the first quarter of 2018, leaving the Bank zero exposure to Covered Funds securities since that time. See "Regulation and Supervision –Dodd-Frank Act."

***Regulations could restrict our ability to service and sell mortgage loans.***

The CFPB has issued rules establishing mortgage lending and servicing requirements, which became effective in January 2014. As of January 2016, we ceased originating personal residential mortgages, although we continue to service our current portfolio of such mortgages until they run off. The CFPB's mortgage servicing requirements establish regulatory procedures and obligations for various areas of the servicing process including periodic disclosures, error resolution, borrower information requests, and loss mitigation. See "Regulation and Supervision—Consumer Financial Protection." The CFPB's mortgage servicing rules, as well as other mortgage regulations that the CFPB or other regulators may adopt, could limit our ability to retain certain types of loans or loans to certain borrowers, or could make it more expensive and time consuming to service these loans, which could limit our growth or profitability.

***We will be expected to make additional expenditures on enhanced governance, internal control, compliance, and supervisory programs and to comply with additional regulations as we approach $50 billion in assets.***

The FDIC, as a supervisory matter, expects us to have governance, internal control, compliance, and supervisory programs consistent with our size and activities, which is currently at $47.36 billion as of December 31, 2018. As the Bank approaches $50 billion in assets, the FDIC will generally expect us to develop and implement enhanced governance, internal control, compliance, and supervisory programs, to implement select banking regulations that do not technically apply to an institution of our size or structure, and to incur the costs to implement, staff, and maintain those programs; however, the extent to which the FDIC's expectations may vary as a result of the increase in asset thresholds for a number of functional regulatory requirements imposed under the Dodd-Frank Act is uncertain. Meeting the FDIC's enhanced supervisory expectations could cause us to incur materially greater costs than comparably sized institutions with a different primary federal regulator and could prevent us from making profitable investments or from engaging in new activities.

***The recently enacted Economic Growth Act did not eliminate many of the aspects of the Dodd Frank Act that have increased our compliance costs, and remains subject to further rulemaking.***

The Economic Growth Act represents modest reform to the regulation of the financial services industry primarily through certain amendments of the Dodd-Frank Act. However, many provisions of the Dodd-Frank Act that have increased our compliance costs, such as the Volcker Rule, remain in place. Certain of the provisions amended by the Economic Growth Act took effect immediately, while others are subject to ongoing joint agency rulemakings. It is not possible to predict when any final rules would ultimately be issued through any such rulemakings, and what the specific content of such rules will be. Although we expect to benefit from many aspects of this legislative reform, the legislation and any implementing rules that are ultimately issued could have adverse implications on the financial industry, the competitive environment, and our ability to conduct business. In addition, the federal banking agencies indicated through interagency guidance that the capital planning and risk management practices of institutions with total assets less than $100 billion would continue to be reviewed through the regular supervisory process, which may offset the impact of the Economic Growth Acts changes regarding stress testing and risk management.

***The financial services industry, as well as the broader economy, may be subject to new legislation, regulation, and government policy.***

In November 2018, the Democrats took control of the U.S. House of Representatives and assumed leadership of the House Financial Services Committee. In December 2018, Congress confirmed a new Director of the CFPB. As a result of the changes and political and economic trends, new regulatory initiatives may be stalled and certain previously enacted regulations may be revisited. Recent appointments to the Board of Governors of the Federal Reserve could affect monetary policy and interest rates, and changes in fiscal policy could affect broader patterns of trade and economic growth. At this time, further impact of these leadership changes and the potential impact on the regulatory requirements applicable to us and our supervision by these agencies is uncertain. See "Regulation and Supervision–Future Legislation."

***The soundness of other financial institutions could adversely affect us.***

Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships. We have exposure to many different industries and counterparties, and we routinely execute transactions with counterparties in the financial services industry, including broker-dealers, commercial banks, investment banks, mutual and hedge funds and other institutional clients. Many of these transactions expose us to credit risk in the event of default of our counterparty or client. In addition, our credit risk may be exacerbated when the collateral held by us cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due us. There can be no assurance that any such losses would not materially and adversely affect our results of operations.

***Regulatory net capital requirements significantly affect and often constrain our brokerage business.***

The SEC, FINRA, and various other regulatory bodies in the United States have rules with respect to net capital requirements for broker-dealers that affect Signature Securities. These rules require that at least a substantial portion of a broker-dealer's assets be kept in cash or highly liquid investments. Signature Securities must comply with these net capital requirements, which limit operations that require intensive use of capital, such as trading activities. These rules could also restrict our ability to withdraw capital from our broker-dealer subsidiary, even in circumstances where this subsidiary has more than the minimum amount of required capital. This, in turn, could limit our ability to pay dividends, implement our business strategies and pay interest on and repay the principal of our debt. A change in these rules, or the imposition of new rules, affecting the scope, coverage, calculation, or amount of net capital requirements could have material adverse effects. Significant operating losses or any unusually large charge against net capital could also have material adverse effects.

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

All federal prohibitions on the ability of financial institutions to pay interest on demand deposit accounts were repealed as part of the Dodd-Frank Act. As a result, some financial institutions have commenced offering interest on demand deposits to compete for clients. As of December 31, 2018, $12.02 billion, or 33.0%, of our total deposits were held in non-interest-bearing demand deposit accounts. Particularly to the extent that interest rates return to higher levels, our interest expense will increase and our net interest margin will decrease if we have to offer higher rates of interest on demand deposits than we currently offer to attract additional clients or maintain current clients, which could have a material adverse effect on our business, financial condition and results of operations.

## ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

## ITEM 2. PROPERTIES

Our principal executive offices are located at 565 Fifth Avenue, New York, New York, 10017, in space leased by the Bank. In addition, we conduct our business at the following locations in facilities that are leased for various terms and rates. Many of the lease contracts include modest annual escalation agreements.

| Location | Number of Offices |
|---|---|
| Private Client Offices | |
| Manhattan | 9 |
| Long Island | 7 |
| Queens | 4 |
| Brooklyn | 4 |
| Westchester | 2 |
| Staten Island | 2 |
| Bronx | 1 |
| Greenwich, CT | 1 |
| San Francisco, CA | 1 |
| Representative and Client Accommodation Offices | |
| Manhattan | 1 |
| Brooklyn | 1 |
| Bank and Brokerage Operations and Support | |
| Manhattan | 3 |
| Long Island | 1 |
| SBA & Institutional Trading | |
| Houston, TX | 1 |
| Signature Financial | |
| Bethel, CT | 1 |
| Bothell, WA | 1 |
| El Dorado Hills, CA | 1 |
| Littleton, CO | 1 |
| Norwell, MA | 1 |
| Prairie, MN | 1 |
| Woodstock, GA | 1 |
| Signature Public Funding Corp. | |
| Towson, MD | 1 |
| Total Locations | 46 |

For additional information on our lease commitments, see Note 19 to our Consolidated Financial Statements.

## ITEM 3.  LEGAL PROCEEDINGS

We are subject to various pending and threatened legal actions relating to the conduct of our normal business activities.  In the opinion of management, the ultimate aggregate liability, if any, arising out of any such pending or threatened legal actions will not be material to our Consolidated Financial Statements.

## 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

***Market Information and Holders of Record***

Our common stock is listed on the NASDAQ Global Select Market under the symbol "SBNY." As of December 31, 2018, 55,405,531 shares of our common stock were issued and 55,039,433 shares were outstanding.

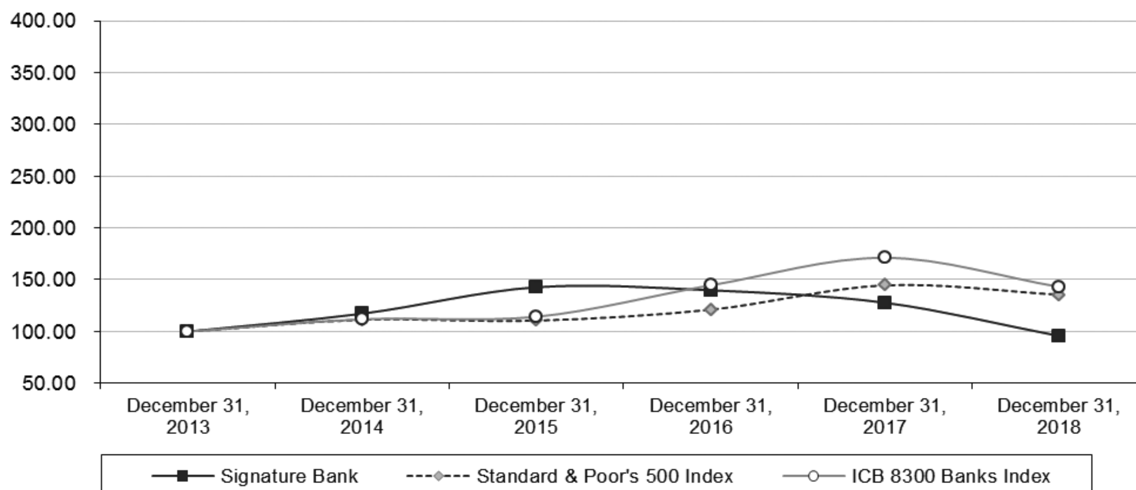
On December 31, 2018, the last reported sale price of our common stock was $102.81 and there were eight holders of record of our common stock, including record holders on behalf of an indeterminate number of beneficial holders.

***Equity Incentive Plan Information***

The information set forth under the caption "Equity Incentive Plan Information" in our Proxy Statement for the Annual Meeting of Stockholders to be held on April 18, 2019 is incorporated herein by reference.

***Performance Graph***

The following graph compares the performance of our common stock with the performance of the Standard & Poor's 500 Index and the Industry Classification Benchmark ("ICB") 8300 Banks Index:




The performance period reflected below assumes that $100 was invested in our common stock and each of the indexes listed below on December 31, 2013. The performance of our common stock reflected below is not indicative of our future performance.

| | December 31, 2013 | December 31, 2014 | December 31, 2015 | December 31, 2016 | December 31, 2017 | December 31, 2018 |
|---|---|---|---|---|---|---|
| Signature Bank | 100.00 | 117.26 | 142.78 | 139.82 | 127.78 | 95.71 |
| Standard & Poor's 500 Index | 100.00 | 111.39 | 110.58 | 121.13 | 144.65 | 135.63 |
| ICB 8300 Banks Index | 100.00 | 111.83 | 114.30 | 144.63 | 171.24 | 143.15 |

***The Performance Graph does not constitute soliciting material and should not be deemed filed or incorporated by reference into any Signature Bank filing under the Securities Exchange Act of 1934, except to the extent we specifically incorporate the Performance Graph therein by reference.***

***Unregistered Sales of Equity Securities***

During the quarter ended December 31, 2018, we issued an aggregate of 25,283 shares of our common stock in connection with investor exercises of warrants issued under our 2010 TARP Capital Purchase Program.

***Dividends***

Because of the expected savings from the Tax Cuts and Jobs Act of 2017, we declared and paid quarterly cash dividends on our common stock in the third and fourth quarters of 2018. The first quarter of 2019 dividend payment was made on February 15, 2019. Any future determination to pay dividends will be at the discretion of our Board of Directors and will be dependent upon then existing conditions, including our financial condition and results of operations, capital requirements, contractual restrictions, business prospects and other factors that the Board of Directors considers relevant.

In addition, payments of dividends may be subject to the prior approval of the New York State Department of Financial Services and the FDIC. Under New York law, we are prohibited from declaring a dividend so long as there is any impairment of our capital stock. In addition, we would be required to obtain the approval of the New York State Department of Financial Services if the total of all our dividends declared in any calendar year would exceed the total of our net profits for that year combined with retained net profits of the preceding two years, less any required transfer to surplus or a fund for the retirement of any preferred stock. We would also be required to obtain the approval of the FDIC prior to declaring a dividend if after paying the dividend we would be undercapitalized, significantly undercapitalized or critically undercapitalized. Our ability to pay dividends also depends upon the amount of cash available to us from our subsidiaries. Restrictions on our subsidiaries' ability to make dividends and advances to us will tend to limit our ability to pay dividends to our shareholders.

***Share Repurchase Program***

On October 17, 2018, the Bank shareholders approved our common stock repurchase program which provides the Bank the ability to repurchase common stock from shareholders in the open market up to an amount of $500.0 million. During the fourth quarter of 2018, the Bank repurchased 358,492 shares of common stock for a total of $41.8 million. Therefore, as of December 31, 2018, the remaining program balance is $458.2 million. The repurchased shares are held in our Treasury account and may be used for various corporate purposes, including, but not limited to, the vesting of restricted stock awards or potential future common stock offerings. Share buybacks are also subject to shareholder and regulatory approval, which were received for this repurchase program in October and November 2018, respectively.

## ITEM 6. SELECTED FINANCIAL DATA

The information set forth below should be read in conjunction with our Consolidated Financial Statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," each of which is included elsewhere in this Annual Report on Form 10-K.

| | At or for the years ended December 31, | | | | |
|---|---|---|---|---|---|
| *(dollars in thousands, except per share amounts)* | **2018** | **2017** | **2016** | **2015** | **2014** |
| **SELECTED OPERATING DATA** | | | | | |
| Interest income | $ 1,708,920 | 1,470,169 | 1,317,151 | 1,106,948 | 924,273 |
| Interest expense | 409,933 | 232,583 | 169,909 | 129,847 | 123,122 |
| Net interest income before provision for loan and lease losses | 1,298,987 | 1,237,586 | 1,147,242 | 977,101 | 801,151 |
| Provision for loan and lease losses | 162,524 | 263,297 | 155,774 | 44,914 | 31,110 |
| Net interest income after provision for loan and lease losses | 1,136,463 | 974,289 | 991,468 | 932,187 | 770,041 |
| Non-interest income: | | | | | |
| Net impairment losses on securities recognized in earnings | (16) | (633) | (427) | (963) | (1,724) |
| Total non-interest income | 23,278 | 36,041 | 42,750 | 37,104 | 34,982 |
| Non-interest expense | 486,278 | 435,066 | 376,771 | 341,214 | 293,244 |
| Income before income taxes | 673,463 | 575,264 | 657,447 | 628,077 | 511,779 |
| Income tax expense | 168,121 | 188,055 | 261,123 | 255,012 | 215,075 |
| Net income | $ 505,342 | 387,209 | 396,324 | 373,065 | 296,704 |
| **PER COMMON SHARE DATA** | | | | | |
| Earnings per share - basic | $ 9.27 | 7.17 | 7.42 | 7.35 | 6.05 |
| Earnings per share - diluted | $ 9.23 | 7.12 | 7.37 | 7.27 | 5.95 |
| Dividends per common share | $ 1.12 | - | - | - | - |
| **BALANCE SHEET DATA** | | | | | |
| Total assets | $ 47,364,816 | 43,117,720 | 39,047,611 | 33,450,545 | 27,318,640 |
| Securities available-for-sale | 7,301,604 | 6,953,719 | 6,335,347 | 6,240,761 | 6,073,459 |
| Securities held-to-maturity | 1,883,533 | 1,996,376 | 2,038,125 | 2,133,144 | 2,208,551 |
| Loans held for sale | 485,305 | 432,277 | 559,528 | 456,358 | 548,297 |
| Loans and leases, net | 36,193,122 | 32,416,580 | 28,829,670 | 23,597,541 | 17,693,316 |
| Allowance for loan and lease losses | 230,005 | 195,959 | 213,495 | 195,023 | 164,392 |
| Deposits | 36,378,773 | 33,439,827 | 31,861,260 | 26,773,923 | 22,620,275 |
| Borrowings | 6,048,174 | 5,242,381 | 3,200,488 | 3,537,163 | 2,050,163 |
| Shareholders' equity | 4,407,140 | 4,031,691 | 3,612,264 | 2,891,834 | 2,496,238 |

*(Continued on the next page)*

| (dollars in thousands, except per share amounts) | At or for the years ended December 31, 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|
| **OTHER DATA** | | | | | |
| Assets under management | $ 3,784,716 | $ 3,607,453 | $ 3,354,085 | $ 5,207,906 | $ 3,566,595 |
| Average interest-earning assets | $ 44,434,158 | $ 40,174,810 | $ 36,004,958 | $ 29,962,220 | $ 24,340,755 |
| Full-time employee equivalents | 1,393 | 1,305 | 1,218 | 1,122 | 1,010 |
| Private client offices | 31 | 30 | 30 | 29 | 28 |
| **SELECTED FINANCIAL RATIOS** | | | | | |
| **Performance Ratios:** | | | | | |
| Return on average assets | 1.12% | 0.95% | 1.09% | 1.23% | 1.20% |
| Return on average shareholders' equity | 11.98% | 10.13% | 12.19% | 13.85% | 13.81% |
| Yield on average interest-earning assets | 3.85% | 3.66% | 3.66% | 3.69% | 3.80% |
| Yield on average interest-earning assets, tax-equivalent basis (1) | 3.85% | 3.67% | 3.66% | 3.69% | 3.80% |
| Average rate on deposits and borrowings | 1.01% | 0.64% | 0.52% | 0.47% | 0.55% |
| Net interest margin | 2.92% | 3.08% | 3.19% | 3.26% | 3.29% |
| Net interest margin, tax-equivalent basis (1) | 2.93% | 3.09% | 3.19% | 3.26% | 3.29% |
| Efficiency ratio (2) | 36.78% | 34.16% | 31.66% | 33.64% | 35.07% |
| **Asset Quality Ratios:** | | | | | |
| Net charge-offs to average loans | 0.38% | 0.92% | 0.52% | 0.07% | 0.01% |
| ALLL to total loans | 0.63% | 0.60% | 0.74% | 0.82% | 0.92% |
| ALLL to non-accrual loans | 211.69% | 59.94% | 135.49% | 271.22% | 782.52% |
| Non-accrual loans to total loans | 0.30% | 1.00% | 0.54% | 0.30% | 0.12% |
| Non-performing assets to total assets | 0.34% | 0.83% | 0.46% | 0.22% | 0.08% |
| **Capital and Liquidity Ratios:** | | | | | |
| Tier 1 Leverage Capital Ratio | 9.70% | 9.72% | 9.61% | 8.87% | 9.25% |
| Common Equity Tier 1 Risk-Based Capital Ratio (3) | 12.11% | 11.99% | 11.92% | 11.33% | - |
| Tier 1 Risk-Based Capital Ratio | 12.11% | 11.99% | 11.92% | 11.33% | 13.49% |
| Total Risk-Based Capital Ratio | 13.41% | 13.32% | 13.46% | 12.10% | 14.39% |
| Average equity to average assets | 9.37% | 9.38% | 8.93% | 8.88% | 8.69% |
| Average tangible equity to average tangible assets (4) | 9.27% | 9.31% | 8.88% | 8.88% | 8.69% |
| **Per common share data:** | | | | | |
| Number of weighted average common shares outstanding | 54,406 | 54,001 | 53,406 | 50,739 | 49,066 |
| Book value per common share | $ 80.07 | $ 73.33 | $ 66.15 | $ 56.81 | $ 49.61 |

(1) Based on the 21 percent U.S. federal statutory tax rate for 2018 and the 35 percent rate for 2017 and prior. The tax-equivalent basis is considered a non-GAAP financial measure and should be considered in addition to, not as a substitute for or superior to, financial measures determined in accordance with GAAP. This ratio is a metric used by management to evaluate the impact of tax-exempt assets on the Bank's yield on interest-earning assets and net interest margin.

(2) The efficiency ratio is considered a non-GAAP fianancial measure and is calculated by dividing non-interest expense by the sum of net interest income before provision for loan and lease losses and non-interest income. This ratio is a metric used by management to evaluate the performance of the Bank's business activities. A decrease in our efficiency ratio represents improvement.

(3) As part of the final rules implementing Basel III regulatory capital reforms, a new common equity Tier 1 risk-based capital ratio was added to existing minimum capital requirements as of January 1, 2015.

(4) This ratio is considered to be a non-GAAP financial measure and should be considered in addition to, not as a substitute for or superior to, financial measures determined in accordance with GAAP. We believe this non-GAAP ratio, when viewed together with the corresponding ratios calculated in accordance with GAAP, provides meaningful supplemental information regarding our performance.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with "Selected Financial Data" and our Consolidated Financial Statements and related notes, each of which is included elsewhere in this Annual Report on Form 10-K. Some of the statements in the following discussion are forward-looking statements. See "Private Securities Litigation Reform Act Safe Harbor Statement."

### Overview

We have grown to $47.36 billion in assets, $36.38 billion in deposits, $36.42 billion in loans, $4.41 billion in equity capital and $3.78 billion in other assets under management as of December 31, 2018.

We believe the growth in our profitability is based on several key factors, including:

- the significant growth of our interest-earning asset base each year;
- our ability to maintain and grow core deposits, a key funding source, which has resulted in increased net interest income from 2001 onward; and
- our ability to control non-interest expenses, which has contributed to our low efficiency ratio of 36.8% for the year ended December 31, 2018.

An important aspect of our growth strategy is the ability to provide personalized, high quality service and to effectively manage a large number of client relationships throughout the New York metropolitan area. Since the commencement of our operations, we have successfully recruited and retained more than 550 experienced private client banking team professionals. We believe that our existing operations infrastructure will allow us to grow our business over the next few years both with respect to the size and number of client relationships, and geographically within the New York metropolitan area, as well as on the West Coast where we have significant client synergies without substantial additional capital expenditures.

### Critical Accounting Policies

We follow financial accounting and reporting policies that are in accordance with U.S. generally accepted accounting principles ("GAAP"). On an ongoing basis, we evaluate our significant accounting policies and associated estimates applied in our consolidated financial statements. Some of these accounting policies require management to make difficult, subjective or complex judgments. The policies noted below, however, are deemed to be our "critical accounting policies" under the definition given to this term by the SEC - those policies that are most important to the presentation of a company's financial condition and results of operations, and require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

The judgments used by management in applying the critical accounting policies may be affected by deterioration in the economic environment, which may result in changes to future financial results. Specifically, subsequent evaluations of the loan portfolio, in light of the factors then prevailing, may result in significant changes to the ALLL in future periods, and the inability to collect on outstanding loans could result in increased loan losses.

See Note 2(g) for our accounting policies related to the ALLL.

### New Accounting Standards

See Note 2(t) for discussion regarding new accounting standards recently adopted and those expected to be adopted in the future.

## Results of Operations

The following is a discussion and analysis of our results of operations for the year ended December 31, 2018 compared to the year ended December 31, 2017 and for the year ended December 31, 2017 compared to the year ended December 31, 2016.

### Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

### Net Income

Net income for the year ended December 31, 2018 was $505.3 million, or $9.23 diluted earnings per share, compared to $387.2 million, or $7.12 diluted earnings per share, for the year ended December 31, 2017. The increase was primarily due to a decrease of $100.8 million in the provision for loan losses, nearly all attributable to the NYC taxi medallion portfolio. The increase was also driven by a $238.8 million increase in interest income, which was partially offset by an increase of $177.4 million in interest expense, resulting in a net increase of $61.4 million in net interest income from continuing deposit and loan growth. This overall increase was partially offset by an increase of $51.2 million in non-interest expense attributable to the addition of new private client banking teams, as well as an increase in costs in our risk management and compliance related activities. The returns on average shareholders' equity and average total assets for the year ended December 31, 2018 were 11.98% and 1.12%, respectively, compared to 10.13% and 0.95% for the year ended December 31, 2017.

| | *Years ended December 31,* | |
|---|---|---|
| *(in thousands)* | **2018** | **2017** |
| Interest income | $ 1,708,920 | 1,470,169 |
| Interest expense | 409,933 | 232,583 |
| Net interest income before provision for loan and lease losses | 1,298,987 | 1,237,586 |
| Provision for loan and lease losses | 162,524 | 263,297 |
| Non-interest income: | | |
| Net impairment losses on securities recognized in earnings | (16) | (633) |
| Total non-interest income | 23,278 | 36,041 |
| Non-interest expense | 486,278 | 435,066 |
| Income tax expense | 168,121 | 188,055 |
| Net income | $ 505,342 | 387,209 |

## Net Interest Income

Net interest income is the difference between interest earned on assets and interest incurred on liabilities. The following table presents an analysis of net interest income by each major category of interest-earning assets and interest-bearing liabilities for the years ended December 31, 2018 and 2017:

| | *Years ended December 31,* | | | | | |
|---|---|---|---|---|---|---|
| | *2018* | | | *2017* | | |
| *(dollars in thousands)* | **Average Balance** | **Interest Income/ Expense** | **Average Yield/ Rate** | **Average Balance** | **Interest Income/ Expense** | **Average Yield/ Rate** |
| **INTEREST-EARNING ASSETS** | | | | | | |
| Short-term investments | $ 463,799 | 8,925 | 1.92% | 462,351 | 5,017 | 1.09% |
| Investment securities | 9,392,563 | 299,697 | 3.19% | 8,948,973 | 269,624 | 3.01% |
| Commercial loans, mortgages and leases (1)(2) | 33,972,459 | 1,383,531 | 4.07% | 30,299,144 | 1,184,911 | 3.91% |
| Residential mortgages and consumer loans (1) | 230,727 | 9,719 | 4.21% | 267,757 | 10,147 | 3.79% |
| Loans held for sale | 374,610 | 10,863 | 2.90% | 196,585 | 4,334 | 2.20% |
| Total interest-earning assets | 44,434,158 | 1,712,735 | 3.85% | 40,174,810 | 1,474,033 | 3.67% |
| Non-interest-earning assets | 611,430 | | | 578,233 | | |
| Total assets | $ 45,045,588 | | | 40,753,043 | | |
| **INTEREST-BEARING LIABILITIES** | | | | | | |
| Interest-bearing deposits | | | | | | |
| NOW and interest-bearing demand | $ 3,661,849 | 52,426 | 1.43% | 3,864,932 | 29,915 | 0.77% |
| Money market | 17,878,509 | 207,690 | 1.16% | 17,086,353 | 125,014 | 0.73% |
| Time deposits | 1,648,433 | 29,132 | 1.77% | 1,504,887 | 16,900 | 1.12% |
| Non-interest-bearing demand deposits | 11,954,403 | - | - | 10,702,062 | - | - |
| Total deposits | 35,143,194 | 289,248 | 0.82% | 33,158,234 | 171,829 | 0.52% |
| Subordinated debt | 257,748 | 14,573 | 5.65% | 256,953 | 14,535 | 5.66% |
| Other borrowings | 5,073,852 | 106,112 | 2.09% | 3,143,218 | 46,219 | 1.47% |
| Total deposits and borrowings | 40,474,794 | 409,933 | 1.01% | 36,558,405 | 232,583 | 0.64% |
| Other non-interest-bearing liabilities and shareholders' equity | 4,570,794 | | | 4,194,638 | | |
| Total liabilities and shareholders' equity | $ 45,045,588 | | | 40,753,043 | | |
| **OTHER DATA** | | | | | | |
| Net interest income / interest rate spread (2) | | 1,302,802 | 2.84% | | 1,241,450 | 3.03% |
| Tax-equivalent adjustment | | (3,815) | | | (3,864) | |
| Net interest income, as reported | | 1,298,987 | | | 1,237,586 | |
| Net interest margin | | | 2.92% | | | 3.08% |
| Tax-equivalent effect | | | 0.01% | | | 0.01% |
| Net interest margin on a fully tax-equivalent basis (2) | | | 2.93% | | | 3.09% |
| Ratio of average interest-earnings assets to average interest-bearing liabilities | | | 109.78% | | | 109.89% |

(1) Average loan balances include non-accrual loans along with deferred fees and costs.

(2) Presented on a tax-equivalent, non-GAAP basis for municipal leasing and financing transactions using the U.S. federal statutory tax rate of 21 percent for the period ended December 31, 2018 and 35 percent for the period ended December 31, 2017.

Interest income and interest expense are affected both by changes in the volume of interest-earning assets and interest-bearing liabilities and by changes in yields and interest rates. The table below analyzes the impact of changes in volume (changes in average outstanding balances multiplied by the prior period's rate) and changes in interest rate (changes in interest rates multiplied by the current period's average balance). Changes that are caused by a combination of interest rate and volume changes are allocated proportionately to both changes in volume and changes in interest rate. The effect of nonperforming assets is included in the table below.

| | *Year ended December 31, 2018 vs. 2017* | | |
|---|---|---|---|
| *(in thousands)* | **Change Due to Rate** | **Change Due to Volume** | **Total Change** |
| **INTEREST INCOME** | | | |
| Short-term investments | $ 3,892 | 16 | 3,908 |
| Investment securities | 16,708 | 13,365 | 30,073 |
| Commercial loans, mortgages and leases (1) | 54,967 | 143,653 | 198,620 |
| Residential mortgages and consumer loans | 975 | (1,403) | (428) |
| Loans held for sale | 2,604 | 3,925 | 6,529 |
| Total interest income | 79,146 | 159,556 | 238,702 |
| **INTEREST EXPENSE** | | | |
| Interest-bearing deposits | | | |
| NOW and interest-bearing demand | 24,083 | (1,572) | 22,511 |
| Money market | 76,880 | 5,796 | 82,676 |
| Time deposits | 10,620 | 1,612 | 12,232 |
| Total interest-bearing deposits | 111,583 | 5,836 | 117,419 |
| Subordinated debt | (7) | 45 | 38 |
| Borrowings | 31,504 | 28,389 | 59,893 |
| Total interest expense | 143,080 | 34,270 | 177,350 |
| Net interest income | $ (63,934) | 125,286 | 61,352 |

(1) Presented on a tax-equivalent, non-GAAP basis for municipal leasing and financing transactions using the U.S. federal statutory tax rate of 21 percent for the period ended December 31, 2018 and 35 percent for the period ended December 31, 2017.

Net interest income for the year ended December 31, 2018 was $1.30 billion, an increase of $61.4 million, or 4.96%, over the year ended December 31, 2017. The increase in net interest income for 2018 was largely driven by increases in average interest-earning assets and average deposits, which increased $4.26 billion and $1.98 billion, respectively, compared to the previous year, as well as an increase of 18 basis points in the yield on average interest-earning assets, and increase in prepayment penalty income. However, this increase was offset by a 37 basis point increase in average cost of funds to 1.01% for the year ended December 31, 2018 compared to 0.64% in the prior year due to the higher interest rate environment and increased deposit competition. These same factors contributed to the 16 basis point decline in net interest margin on a tax-equivalent basis to 2.93% for 2018, when compared to the prior year.

Total investment securities averaged $9.39 billion for the year ended December 31, 2018, compared to $8.95 billion for the year ended December 31, 2017. The overall yield on the securities portfolio for the year ended December 31, 2018 was 3.19%, higher when compared to the 3.01% of previous year due to higher reinvestment yields and lower premium amortization due to slower prepayment speeds. Our portfolio primarily consists of high quality and highly-rated mortgage-backed securities, commercial mortgage-backed securities, and collateralized mortgage obligations issued by government agencies, government-sponsored enterprises, and private issuers. We mitigate extension risk through our overall strategy of purchasing relatively stable duration securities that, by

their nature, have lower yields. At December 31, 2018, the baseline average duration of our investment securities portfolio was approximately 3.33 years, compared to 3.28 years at December 31, 2017.

Total commercial loans, mortgages and leases averaged $33.97 billion for the year ended December 31, 2018, an increase of $3.67 billion or 12.1% over the year ended December 31, 2017. The average yield on this portfolio increased 16 basis points to 4.07% when compared to the year ended December 31, 2017, primarily due to increased market rates. Prepayment penalty income was $28.7 million for the year ended December 31, 2018, compared to $26.8 million for the prior year. Our commercial real estate loans (including multi-family loans) normally have a term of ten years, with a fixed rate of interest in years one through five and a rate that either adjusts annually or is fixed for the five years that follow. Loans that prepay in the first five years generate prepayment penalties ranging from one to five percentage points of the then-current loan balance, depending on the remaining term of the loan. If a loan is still outstanding in the sixth year and the borrower selects the fixed rate option, the prepayment penalties typically reset to a range of one to five percentage points over years six through ten. It is difficult to predict the level of prepayment activity in future periods as it depends on market conditions, real estate values, the actual or perceived direction of market interest rates and the contractual repricing and maturity dates of commercial real estate loans.

We are an active participant in the SBA loan and SBA pool secondary market by purchasing, securitizing, and selling the guaranteed portions of SBA loans, most of which have adjustable rates and float at a spread to the prime rate. Once purchased, we typically warehouse the guaranteed loan for approximately 30 to 180 days and classify them as loans held for sale. From this warehouse, we aggregate like SBA loans by similar characteristics into pools for securitization to the secondary market. The timing of the purchase and sale of such loan pools drives the period-to-period fluctuations in average balances of loans held for sale, which averaged $374.6 million and $196.6 million for the years ended December 31, 2018 and 2017, respectively.

Average total deposits and borrowings increased $3.92 billion, or 10.7%, to $40.47 billion during the year ended December 31, 2018, compared to $36.56 billion for the previous year. Overall cost of funding was 1.01% during 2018, increasing 37 basis points from 0.64% in 2017, primarily due to the increase in market interest rates and increased deposit competition in 2018.

For the year ended December 31, 2018, average non-interest-bearing demand deposits were $11.95 billion, compared to $10.70 billion for the year ended December 31, 2017, an increase of $1.25 billion, or 11.7%. Non-interest-bearing demand deposits continue to comprise a significant component of our deposit mix, representing 33.0% of all deposits at December 31, 2018. Additionally, average NOW and interest-bearing demand and money market accounts totaled $21.54 billion for the year ended December 31, 2018, an increase of $589.1 million, or 2.8%, over the year ended December 31, 2017. Core deposits have provided us with a source of stable and relatively low cost funding, which has positively affected our net interest margin and income. As a result of the current competitive and rising interest rate environment, our funding cost for money market accounts increased to 1.16% for the year ended December 31, 2018 compared to 0.73% for the prior year. Our funding cost for NOW and interest-bearing demand accounts was 1.43% for the year ended December 31, 2018 compared to 0.77% for the year ended December 31, 2017.

Average time deposits, which are relatively short-term in nature, totaled $1.65 billion for the year ended December 31, 2018 and carried an average cost of 1.77% in 2018, up 65 basis points from 1.12% in 2017. Time deposits are offered to supplement our core deposit operations for existing or new client relationships, and are not marketed through retail channels.

For the year ended December 31, 2018, average total borrowings were $5.33 billion, compared to $3.40 billion for the previous year, an increase of $1.93 billion or 56.8%. The increase in average total borrowings, when compared to the previous year, reflects funding needs as a result of our continued loan growth. At December 31, 2018 total borrowings represent approximately 14.3% of all funding liabilities, compared to 13.6% at December 31, 2017. The average cost of our total borrowings was 2.26% for 2018, up 47 basis points from 1.79% in 2017. The increase in the average cost of borrowings primarily reflects higher replacement rates for both matured and new term borrowings.

## Provision and Allowance for Loan and Lease Losses

Our provision for loan and lease losses was $162.5 million for the year ended December 31, 2018, compared to $263.3 million for the prior year, a decrease of $100.8 million, or 38.3%. The decline was driven by lower NYC taxi medallion portfolio charge-offs during the year ended December 31, 2018, compared to the same period a year ago. The remaining NYC taxi medallion portfolio net exposure is $72.6 million. In Chicago, the remaining taxi medallion portfolio net exposure is $14.0 million. Including repossessed taxi medallions, remaining net exposure totals $114.4 million in NYC and $15.9 million in Chicago.

Our ALLL increased $ 34.0 million to $230.0 million at December 31, 2018 from $196.0 million at December 31, 2017. The increase is primarily attributable to an increase in reserves due to growth in the Bank's commercial real estate and commercial and industrial portfolios. Further contributing is an increase in qualitative reserves, primarily the economic and business condition factor in the specialty finance and commercial and industrial portfolios.

For additional information about the provision for loan and lease losses and the ALLL, see the discussion of asset quality and the Allowance for Loan and Lease Losses later in this report, as well as in Note 8 to our Consolidated Financial Statements.

The following table allocates our ALLL based on our judgment of inherent losses in each respective portfolio category according to our methodology for allocating reserves:

| | *December 31,* | | | | | |
|---|---|---|---|---|---|---|
| | *2018* | | | *2017* | | |
| *(dollars in thousands)* | **Loan Amount** | **Allowance Amount** | **Allowance as a % of Loan Amount** | **Loan Amount** | **Allowance Amount** | **Allowance as a % of Loan Amount** |
| Mortgage loans: | | | | | | |
| Multi-family residential property | $ 15,688,481 | 99,964 | 0.64% | 14,512,051 | 82,554 | 0.57% |
| Commercial property | 10,309,837 | 63,328 | 0.61% | 8,902,027 | 53,283 | 0.60% |
| 1-4 family residential property | 620,486 | 3,424 | 0.55% | 621,377 | 2,311 | 0.37% |
| Home equity lines of credit | 116,272 | 2,035 | 1.75% | 133,268 | 1,994 | 1.50% |
| Acquisition, development and construction loans | 1,656,467 | 12,339 | 0.74% | 2,018,901 | 15,844 | 0.78% |
| Other loans: | | | | | | |
| Commercial and industrial | 7,905,488 | 47,257 | 0.60% | 6,070,217 | 39,837 | 0.66% |
| New York City taxi medallions | 72,639 | - | 0.00% | 276,800 | - | 0.00% |
| Chicago taxi medallions | 15,553 | 1,538 | 9.89% | 32,509 | - | 0.00% |
| Philadelphia taxi medallions | 319 | 13 | 4.08% | 585 | - | 0.00% |
| Consumer | 9,038 | 107 | 1.18% | 15,310 | 136 | 0.89% |
| Total | $ 36,394,580 | 230,005 | 0.63% | 32,583,045 | 195,959 | 0.60% |

## Non-Interest Income

For the year ended December 31, 2018, non-interest income was $23.3 million, a decrease of $12.8 million, or 35.4%, when compared with 2017. The decrease was primarily due to $14.4 million in additional amortization of low income housing tax credit investments as a result of an increase in the underlying investment balances compared to the same period last year. These investments have contributed to the reduction of the Bank's effective tax rate.

## Non-Interest Expense

Non-interest expense increased $51.2 million, or 11.8%, to $486.3 million for the year ended December 31, 2018 from $435.1 million for the year ended December 31, 2017. The increase was primarily driven by an increase of $28.9 million in salaries and benefits mostly attributable to the addition of new private client banking teams, along with increased compensation costs driven by the continued growth of our business. This increase was also attributable to an increase of $15.1 million in other general and administrative expenses, primarily as a result of $20.3 million in fair value adjustments related to repossessed New York City taxi medallions, compared to $15.0 million for the same period last year, as well as an increase of $6.6 million in additional client activity related expenses as a result of growth. Further contributing to this trend is a $3.1 million increase in information

technology expenses due to the implementation of new cloud-based systems (loan and human resource systems) during the year, as well as increased transaction volume from the continued growth of our business.

**Stock-Based Compensation**

We recognize compensation expense in our Consolidated Statement of Income for all stock-based compensation awards over the requisite service period with a corresponding credit to additional paid-in capital. Compensation expense is measured based on grant date fair value and is included in salaries and benefits (non-interest expense).

As of December 31, 2018, our total unrecognized compensation cost related to unvested restricted shares was $76.0 million, which is expected to be recognized over a weighted-average period of 1.80 years. During the years ended December 31, 2018 and 2017, we recognized compensation expense of $52.6 million and $46.4 million, respectively, for restricted shares. The total fair value of restricted shares that vested during the years ended December 31, 2018 and 2017 was $62.4 million and $59.5 million, respectively.

**Income Taxes**

We recognized income tax expense for the year ended December 31, 2018 of $168.1 million reflecting an effective tax rate 25.0%, compared to $188.1 million for the year ended December 31, 2017 reflecting an effective tax rate of 32.7%.

The decrease in the effective tax rate is primarily due to the lower statutory corporate tax rate as a result of the enacted Federal corporate tax reform, partially offset by the absence of the 2017 tax benefit associated with the significant taxi medallion charge-offs and the impact of the higher statutory corporate tax rate related to that benefit.

**Segment Results**

On an annual basis, we reevaluate our segment reporting conclusions. Based on our internal operating structure and the relative significance of the specialty finance business, our operations are organized into two reportable segments representing our core businesses – Commercial Banking and Specialty Finance.

Commercial Banking principally consists of commercial real estate lending, commercial and industrial lending, and commercial deposit gathering activities, while Specialty Finance principally consists of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, municipal and national franchise financing and/or leasing. The primary factors considered in determining these reportable segments include the nature of the underlying products and services offered, how products and services are provided to our clients, and our internal operating structure.

The segment information reported uses a “management approach” based on how management organizes its segments for purposes of making operating decisions and assessing performance. The Bank’s segment results are intended to reflect each segment as if it were a stand-alone business. Management’s accounting process uses various estimates and allocation methodologies to measure the performance of the segments. To determine financial performance for each segment, the Company allocates funding costs and certain non-interest expenses to each segment, as applicable. Management does not consider income tax expense when assessing segment profitability and, therefore, it is not disclosed in the tables below. Instead, the Bank’s income tax expense is calculated and evaluated at a consolidated level.

The following table presents the financial data for each reportable segment for the periods presented:

| | Year ended December 31, 2018 | | | |
|---|---|---|---|---|
| *(in thousands)* | **Commercial Banking** | **Specialty Finance** | **Eliminations (1)** | **Consolidated** |
| Net interest income | $ 1,212,969 | 86,018 | - | 1,298,987 |
| Provision for (recovery of) loan and lease losses | 28,707 | 133,817 | - | 162,524 |
| Total non-interest income | 18,738 | 4,564 | (24) | 23,278 |
| Total non-interest expense | 432,819 | 53,483 | (24) | 486,278 |
| Income (loss) before income taxes | 770,181 | (96,718) | - | 673,463 |
| Total assets | $ 47,594,348 | 4,357,754 | (4,587,286) | 47,364,816 |

(1) Eliminations related to intercompany funding.

| | Year ended December 31, 2017 | | | |
|---|---|---|---|---|
| *(in thousands)* | **Commercial Banking** | **Specialty Finance** | **Eliminations (1)** | **Consolidated** |
| Net interest income | $ 1,159,208 | 78,378 | - | 1,237,586 |
| Provision for (recovery of) loan and lease losses | 44,283 | 219,014 | - | 263,297 |
| Total non-interest income | 31,486 | 4,579 | (24) | 36,041 |
| Total non-interest expense | 392,041 | 43,049 | (24) | 435,066 |
| Income (loss) before income taxes | 754,370 | (179,106) | - | 575,264 |
| Total assets | $ 43,388,741 | 4,063,495 | (4,334,516) | 43,117,720 |

(1) Eliminations related to intercompany funding.

***Commercial Banking***

Commercial Banking consists principally of commercial real estate lending, commercial and industrial lending, and commercial deposit gathering activities in the New York Metropolitan area.

| | Years ended December 31, | |
|---|---|---|
| *(in thousands)* | **2018** | **2017** |
| Net interest income | $ 1,212,969 | 1,159,208 |
| Provision for (recovery of) loan and lease losses | 28,707 | 44,283 |
| Total non-interest income | 18,738 | 31,486 |
| Total non-interest expense | 432,819 | 392,041 |
| Income (loss) before income taxes | 770,181 | 754,370 |
| Total assets | $ 47,594,348 | 43,388,741 |

Commercial Banking net interest income was $1.21 billion for the year ended December 31, 2018, an increase of $53.8 million, or 4.6%, when compared to $1.16 billion in the prior year. This increase was primarily due to growth in average interest-earning assets and the yield earned on those assets, partially offset by an increase in average deposits and an increase in the cost of funds as a result of the current competitive environment, an increase in borrowings, and an increase in replacement rates.

The provision for loan and lease losses decreased $15.6 million, or 35.2%, to a $28.7 million reserve build, compared to a $44.3 million reserve build in the prior year. The decrease was primarily due to the absence of a 2017 increase in the commercial real estate portfolio qualitative reserves primarily related to loan review, and the nature and volume of loans. For additional information about the provision for loan and lease losses, see the discussion of asset quality and the ALLL later in this report, as well as in Note 8 to our Consolidated Financial Statements.

Non-interest expense was $432.8 million for the year ended December 31, 2018, an increase of $40.8 million, or 10.4%, when compared to $392.0 million in the prior year. The increase was primarily attributable to an increase in salaries and benefits expense due to the addition of new private client banking teams and an increase in compensation costs driven by the growth of our business. Further contributing is an increase in other general and administrative expense and information technology expenses, also attributable to the continued growth of our business.

The increase of $4.20 billion in total assets, or 9.7%, from $43.39 billion as of December 31, 2017 to $47.59 billion as of December 31, 2018 was primarily attributable to growth in our commercial real estate loan portfolio.

***Specialty Finance***

Specialty Finance consists principally of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, municipal and national franchise financing and/or leasing. Specialty Finance's clients are located throughout the United States.

| *(in thousands)* | | Years ended December 31, 2018 | 2017 |
|---|---|---|---|
| Net interest income | $ | 86,018 | 78,378 |
| Provision for (recovery of) loan and lease losses | | 133,817 | 219,014 |
| Total non-interest income | | 4,564 | 4,579 |
| Total non-interest expense | | 53,483 | 43,049 |
| Income (loss) before income taxes | | (96,718) | (179,106) |
| Total assets | $ | 4,357,754 | 4,063,495 |

Specialty Finance net interest income was $86.0 million for the year ended December 31, 2018, an increase of $7.6 million when compared to $78.4 million in the prior year. The increase is primarily attributable to the increase in interest income due to continued loan growth in our equipment leasing portfolios, as well as an increase in asset yields, partially offset by a decrease in interest income as a result of the entire taxi medallion portfolio being placed on nonaccrual in the second quarter of 2017.

The provision for loan and lease losses decreased $85.2 million, or 38.9%, to $133.8 million for the year ended December 31, 2018 from $219.0 million for the year ended December 31, 2017. The decline was driven by lower NYC taxi medallion portfolio charge-offs during the year ended December 31, 2018, as the underlying collateral value decline in the first quarter of 2018, while large, was less significant than that in the year ended December 31, 2017. For additional information about the provision for loan and lease losses, see the discussion of asset quality and the ALLL later in this report, as well as in Note 8 to our Consolidated Financial Statements.

Non-interest expense was $53.5 million for the year ended December 31, 2018, an increase of $10.4 million, or 24.2%, when compared to $43.1 million for the same period a year ago, nearly all due to the increase in fair value adjustments related to repossessed taxi medallions as a result of the significant decline in taxi medallion values during the first quarter of 2018 related to a larger repossessed asset population in 2018.

The increase of $294.3 million in total assets, or 7.2%, from $4.06 billion as of December 31, 2017 to $4.36 billion as of December 31, 2018 was primarily attributable to growth in our equipment leasing portfolios, partially offset by the reduction of taxi medallion balances due to charge-offs and the application of principal and interest payments to the related nonaccrual loan balances.

**Year Ended December 31, 2017 Compared to Year Ended December 31, 2016**

**Net Income**

Net income for the year ended December 31, 2017 was $387.2 million, or $7.12 diluted earnings per share, compared to $396.3 million, or $7.37 diluted earnings per share, for the year ended December 31, 2016. The decrease in net income was primarily driven by an increase in the provision for loan losses and non-interest expense, as well as a decrease in loan prepayment penalty income, partially offset by increased net interest income, fueled by strong deposit and loan growth. The returns on average shareholders' equity and average total assets for the year ended December 31, 2017 were 10.13% and 0.95%, respectively, compared to 12.19% and 1.09% for the year ended December 31, 2016.

| | *Years ended December 31,* | |
|---|---|---|
| *(in thousands)* | **2017** | **2016** |
| Interest income | $ 1,470,169 | 1,317,151 |
| Interest expense | 232,583 | 169,909 |
| Net interest income before provision for loan and lease losses | 1,237,586 | 1,147,242 |
| Provision for loan and lease losses | 263,297 | 155,774 |
| Non-interest income: | | |
| Net impairment losses on securities recognized in earnings | (633) | (427) |
| Total non-interest income | 36,041 | 42,750 |
| Non-interest expense | 435,066 | 376,771 |
| Income tax expense | 188,055 | 261,123 |
| Net income | $ 387,209 | 396,324 |

## Net Interest Income

Net interest income is the difference between interest earned on assets and interest incurred on liabilities. The following table presents an analysis of net interest income by each major category of interest-earning assets and interest-bearing liabilities for the years ended December 31, 2017 and 2016:

| | *Years ended December 31,* | | | | | |
|---|---|---|---|---|---|---|
| | *2017* | | | *2016* | | |
| *(dollars in thousands)* | **Average Balance** | **Interest Income/ Expense** | **Average Yield/ Rate** | **Average Balance** | **Interest Income/ Expense** | **Average Yield/ Rate** |
| **INTEREST-EARNING ASSETS** | | | | | | |
| Short-term investments | $ 462,351 | 5,017 | 1.09% | 493,646 | 2,456 | 0.50% |
| Investment securities | 8,948,973 | 269,624 | 3.01% | 8,695,632 | 267,406 | 3.08% |
| Commercial loans, mortgages and leases (1) (2) | 30,299,144 | 1,184,911 | 3.91% | 26,212,811 | 1,032,829 | 3.94% |
| Residential mortgages and consumer loans (1) | 267,757 | 10,147 | 3.79% | 297,478 | 11,235 | 3.78% |
| Loans held for sale | 196,585 | 4,334 | 2.20% | 305,391 | 4,572 | 1.50% |
| Total interest-earning assets | 40,174,810 | 1,474,033 | 3.67% | 36,004,958 | 1,318,498 | 3.66% |
| Non-interest-earning assets | 578,233 | | | 410,764 | | |
| Total assets | $ 40,753,043 | | | 36,415,722 | | |
| **INTEREST-BEARING LIABILITIES** | | | | | | |
| Interest-bearing deposits | | | | | | |
| NOW and interest-bearing demand | $ 3,864,932 | 29,915 | 0.77% | 3,591,984 | 16,573 | 0.46% |
| Money market | 17,086,353 | 125,014 | 0.73% | 15,399,825 | 94,294 | 0.61% |
| Time deposits | 1,504,887 | 16,900 | 1.12% | 1,286,775 | 12,418 | 0.97% |
| Non-interest-bearing demand deposits | 10,702,062 | - | - | 9,469,240 | - | - |
| Total deposits | 33,158,234 | 171,829 | 0.52% | 29,747,824 | 123,285 | 0.41% |
| Subordinated debt | 256,953 | 14,535 | 5.66% | 180,120 | 10,202 | 5.66% |
| Borrowings | 3,143,218 | 46,219 | 1.47% | 2,781,305 | 36,422 | 1.31% |
| Total deposits and borrowings | 36,558,405 | 232,583 | 0.64% | 32,709,249 | 169,909 | 0.52% |
| Other non-interest-bearing liabilities and shareholders' equity | 4,194,638 | | | 3,706,473 | | |
| Total liabilities and shareholders' equity | $ 40,753,043 | | | 36,415,722 | | |
| **OTHER DATA** | | | | | | |
| Net interest income / interest rate spread (2) | | 1,241,450 | 3.03% | | 1,148,589 | 3.14% |
| Tax-equivalent adjustment | | (3,864) | | | (1,347) | |
| Net interest income, as reported | | 1,237,586 | | | 1,147,242 | |
| Net interest margin | | | 3.08% | | | 3.19% |
| Tax-equivalent effect | | | 0.01% | | | - |
| Net interest margin on a fully tax-equivalent basis (2) | | | 3.09% | | | 3.19% |
| Ratio of average interest-earnings assets to average interest-bearing liabilities | | | 109.89% | | | 110.08% |

(1) Average loan balances include non-accrual loans along with deferred fees and costs.

(2) Presented on a tax-equivalent, non-GAAP, basis using the U.S. federal statutory tax rate of 35 percent for municipal leasing and financing transactions.

Interest income and interest expense are affected both by changes in the volume of interest-earning assets and interest-bearing liabilities and by changes in yields and interest rates. The table below analyzes the impact of changes in volume (changes in average outstanding balances multiplied by the prior period's rate) and changes in interest rate (changes in interest rates multiplied by the current period's average balance). Changes that are caused by a combination of interest rate and volume changes are allocated proportionately to both changes in volume and changes in interest rate. The effect of nonperforming assets is included in the table below.

| | *Year ended December 31, 2017 vs. 2016* | | |
|---|---|---|---|
| *(in thousands)* | **Change Due to Rate** | **Change Due to Volume** | **Total Change** |
| **INTEREST INCOME** | | | |
| Short-term investments | $ 2,717 | (156) | 2,561 |
| Investment securities | (5,573) | 7,791 | 2,218 |
| Commercial loans, mortgages and leases (1) | (8,926) | 161,008 | 152,082 |
| Residential mortgages and consumer loans | 34 | (1,122) | (1,088) |
| Loans held for sale | 1,391 | (1,629) | (238) |
| Total interest income | (10,357) | 165,892 | 155,535 |
| **INTEREST EXPENSE** | | | |
| Interest-bearing deposits | | | |
| NOW and interest-bearing demand | 12,083 | 1,259 | 13,342 |
| Money market | 20,393 | 10,327 | 30,720 |
| Time deposits | 2,377 | 2,105 | 4,482 |
| Total interest-bearing deposits | 34,853 | 13,691 | 48,544 |
| Subordinated debt | (19) | 4,352 | 4,333 |
| Borrowings | 5,058 | 4,739 | 9,797 |
| Total interest expense | 39,892 | 22,782 | 62,674 |
| Net interest income | $ (50,249) | 143,110 | 92,861 |

(1) Presented on a tax equivalent, non-GAAP, basis using the U.S. federal statutory tax rate of 35 percent for municipal leasing and financing transactions.

Net interest income for the year ended December 31, 2017 was $1.24 billion, an increase of $90.3 million, or 7.87%, over the year ended December 31, 2016. The increase in net interest income for 2017 was largely driven by increases in average interest-earning assets and average deposits, which increased $4.17 billion and $3.41 billion, respectively, compared to the previous year. However, this increase was offset by a 12 basis point increase in average cost of funds to 0.64% for the year ended December 31, 2017 compared to 0.52% in the prior year. The increase in net interest income is further offset by a reduction in prepayment penalty income, lower asset yields on our investment portfolio due to the flat yield curve and lower replacement rates, as well as the commercial loan yield impact of placing the entire taxi medallion portfolio on non-accrual in the second quarter of 2017. These same factors contributed to the ten basis point decline in net interest margin on a tax-equivalent basis to 3.09% for 2017, when compared to the prior year.

Total investment securities averaged $8.95 billion for the year ended December 31, 2017, compared to $8.70 billion for the year ended December 31, 2016. The overall yield on the securities portfolio for the year ended December 31, 2017 was 3.01%, lower when compared to the 3.08% from the previous year due to the aforementioned flat yield curve and lower replacement rates. Our portfolio primarily consists of high quality and highly-rated mortgage-backed securities, commercial mortgage-backed securities, and collateralized mortgage obligations issued by government agencies, government-sponsored enterprises, and private issuers. We mitigate extension risk through our overall strategy of purchasing relatively stable duration securities that, by their nature,

have lower yields. At December 31, 2017, the baseline average duration of our investment securities portfolio was approximately 3.28 years, compared to 3.71 years at December 31, 2016.

Total commercial loans, mortgages and leases averaged $30.30 billion for the year ended December 31, 2017, an increase of $4.09 billion or 15.6% over the year ended December 31, 2016. The average yield on this portfolio decreased three basis points to 3.91% when compared to the year ended December 31, 2016. The decrease in average yield is primarily driven by the impact of placing the entire taxi medallion portfolio on non-accrual in the second quarter of 2017, along with a $5.3 million decrease in prepayment penalty income when compared to the prior year. Prepayment penalty income was $26.8 million for the year ended December 31, 2017, compared to $32.1 million for the prior year. Our commercial real estate loans (including multi-family loans) normally have a term of ten years, with a fixed rate of interest in years one through five and a rate that either adjusts annually or is fixed for the five years that follow. Loans that prepay in the first five years generate prepayment penalties ranging from one to five percentage points of the then-current loan balance, depending on the remaining term of the loan. If a loan is still outstanding in the sixth year and the borrower selects the fixed rate option, the prepayment penalties typically reset to a range of one to five percentage points over years six through ten. It is difficult to predict the level of prepayment activity in future periods as it depends on market conditions, real estate values, the actual or perceived direction of market interest rates and the contractual repricing and maturity dates of commercial real estate loans.

We are an active participant in the SBA loan and SBA pool secondary market by purchasing, securitizing, and selling the guaranteed portions of SBA loans, most of which have adjustable rates and float at a spread to the prime rate. Once purchased, we typically warehouse the guaranteed loan for approximately 30 to 180 days and classify them as loans held for sale. From this warehouse, we aggregate like SBA loans by similar characteristics into pools for securitization to the secondary market. The timing of the purchase and sale of such loan pools drives the period-to-period fluctuations in average balances of loans held for sale, which averaged $196.6 million and $305.4 million for the years ended December 31, 2017 and 2016, respectively.

Average total deposits and borrowings increased $3.85 billion, or 11.8%, to $36.56 billion during the year ended December 31, 2017, compared to $32.71 billion for the previous year. Overall cost of funding was 0.64% during 2017, increasing 12 basis points from 0.52% in 2016, primarily due to the increase in market interest rates in 2017 and the full year impact of the April 2016 issuance of subordinated debt.

For the year ended December 31, 2017, average non-interest-bearing demand deposits were $10.70 billion, compared to $9.47 billion for the year ended December 31, 2016, an increase of $1.23 billion, or 13.0%. Non-interest-bearing demand deposits continue to comprise a significant component of our deposit mix, representing 34.0% of all deposits at December 31, 2017. Additionally, average NOW and interest-bearing demand and money market accounts totaled $20.95 billion for the year ended December 31, 2017, an increase of $1.96 billion, or 10.3%, over the year ended December 31, 2016. Core deposits have provided us with a source of stable and relatively low cost funding, which has positively affected our net interest margin and income. Additionally, short-term escrow deposits continue to provide us with an additional low cost funding alternative. As a result of the 2017 rise in market interest rates, our funding cost for money market accounts increased to 0.73% for the year ended December 31, 2017 compared to 0.61% for the prior year. Our funding cost for NOW and interest-bearing demand accounts was 0.77% for the year ended December 31, 2017 compared to 0.46% for the year ended December 31, 2016.

Average time deposits, which are relatively short-term in nature, totaled $1.50 billion for the year ended December 31, 2017 and carried an average cost of 1.12% in 2017, up 15 basis points from 0.97% in 2016. Time deposits are offered to supplement our core deposit operations for existing or new client relationships, and are not marketed through retail channels.

For the year ended December 31, 2017, average total borrowings were $3.40 billion, compared to $2.96 billion for the previous year, an increase of $438.7 million, or 14.8%. The increase in average total borrowings, when compared to the previous year, reflects funding needs as a result of our continued loan growth. At December 31, 2017, total borrowings represent approximately 13.6% of all funding liabilities, compared to 9.1% at December 31, 2016. The average cost of our total borrowings was 1.79% for 2017, up 22 basis points from 1.57% in 2016. The increase in the average cost of borrowings reflects the issuance of subordinated debt, as well as the increase in other borrowings.

**Provision and Allowance for Loan and Lease Losses**

Our provision for loan and lease losses was $263.3 million for the year ended December 31, 2017, compared to $155.8 million for the prior year, an increase of $107.5 million, or 69.0%. The increased provision was largely due to the increase in net charge-offs related to the NYC taxi medallion portfolio driven by a significant decline in the underlying collateral value during 2017. Additionally, all remaining taxi medallion loans were placed on nonaccrual in 2017 due to the heightened economic stress at an individual borrower level, which contributed to the increased provision. As of December 31, 2017, the NYC taxi medallion portfolio was written down to estimated fair value of $312,000 per medallion, net of selling costs, and the Chicago taxi medallion portfolio was written down to $46,000, net of selling costs. As a result, the Bank significantly reduced its net exposure to the taxi medallion portfolio to $309.9 million at the end of 2017, of which, $276.8 million and $32.5 million were related to NYC and Chicago taxi medallions, respectively. This increase in provision was partially offset by the absence of 2016 charge-off activity related to the Chicago taxi medallion portfolio due to a significant decline in the underlying collateral value in the prior year, as well as the payment default of two of the Bank's largest relationships.

Our ALLL decreased $17.5 million to $196.0 million at December 31, 2017 from $213.5 million at December 31, 2016. The decrease is primarily attributable to taxi medallion charge-offs during 2017 due to the placement of the entire portfolio on nonaccrual and a significant decline in collateral value, partially offset by an increase in reserves due to growth in the Bank's commercial real estate and commercial and industrial portfolios.

For additional information about the provision for loan and lease losses and ALLL, see the discussion of asset quality and the Allowance for Loan and Lease Losses later in this report, as well as in Note 8 to our Consolidated Financial Statements.

The following table allocates our ALLL based on our judgment of inherent losses in each respective portfolio category according to our methodology for allocating reserves:

| | *December 31,* | | | | | | |
|---|---|---|---|---|---|---|---|
| | *2017* | | | | *2016 (1)* | | |
| *(dollars in thousands)* | | **Loan Amount** | **Allowance Amount** | **Allowance as a % of Loan Amount** | **Loan Amount** | **Allowance Amount** | **Allowance as a % of Loan Amount** |
| Mortgage loans: | | | | | | | |
| Multi-family residential property | $ | 14,512,051 | 82,554 | 0.57% | 13,504,619 | 63,855 | 0.47% |
| Commercial property | | 8,902,027 | 53,283 | 0.60% | 7,606,868 | 38,761 | 0.51% |
| 1-4 family residential property | | 621,377 | 2,311 | 0.37% | 529,228 | 2,107 | 0.40% |
| Home equity lines of credit | | 133,268 | 1,994 | 1.50% | 148,094 | 3,182 | 2.15% |
| Acquisition, development and construction loans | | 2,018,901 | 15,844 | 0.78% | 1,799,848 | 11,966 | 0.66% |
| Other loans: | | | | | | | |
| Commercial and industrial | | 6,070,217 | 39,837 | 0.66% | 4,793,135 | 35,159 | 0.73% |
| New York City taxi medallions | | 276,800 | - | 0.00% | 567,925 | 44,319 | 7.80% |
| Chicago taxi medallions | | 32,509 | - | 0.00% | 55,216 | 12,152 | 22.01% |
| Philadelphia taxi medallions | | 585 | - | 0.00% | 4,258 | 1,797 | 42.20% |
| Consumer | | 15,310 | 136 | 0.89% | 10,268 | 197 | 1.92% |
| Total | $ | 32,583,045 | 195,959 | 0.60% | 29,019,459 | 213,495 | 0.74% |

(1) Certain loans were reclassified from other categories and included with construction loans as acquisition, development and construction loans.

For additional information about our provision and ALLL, see the related discussions of asset quality later in this report.

**Non-Interest Income**

For the year ended December 31, 2017, non-interest income was $36.0 million, a decrease of $6.7 million, or 15.7%, when compared with 2016. The decrease in non-interest income was driven by a $3.7 million decrease in net gains on sales of securities, which was due to the absence of a number of 2016 sales that resulted in gains as the Bank capitalized on current market conditions at the time. Further contributing to this decrease is a $7.3 million increase in other losses from amortization of low income housing tax credit investments. This decrease was

partially offset by a $2.5 million increase in net gains on sale of loans and a $1.7 million increase in fees and service charges due to the Bank's continued growth.

**Non-Interest Expense**

Non-interest expense increased $58.3 million, or 15.5%, to $435.1 million for the year ended December 31, 2017 from $376.8 million for the year ended December 31, 2016. This increase was mainly driven by a $26.8 million increase in salaries and benefits mostly attributable to the addition of nine private client banking teams, our continued hiring for the expansion of existing locations, along with increased compensation costs driven by the growth of our business. The increase also reflects a $5.7 million rise in FDIC assessment fees driven by our deposit growth and a $15.5 million increase in other general and administrative expenses, which was primarily attributable to a $12.3 million increase in repossessed taxi medallion fair value adjustments. Further contributing to the increase is a $2.4 million increase in professional fees associated with risk management and compliance related activities, a $2.3 million increase in information technology fees due to additional client activity as a result of our growth, as well as a $3.0 million increase in occupancy and equipment expenses resulting from the continued expansion of existing offices.

**Stock-Based Compensation**

We recognize compensation expense in our Consolidated Statement of Income for all stock-based compensation awards over the requisite service period with a corresponding credit to additional paid-in capital. Compensation expense is measured based on grant date fair value and is included in salaries and benefits (non-interest expense).

As of December 31, 2017, our total unrecognized compensation cost related to unvested restricted shares was $77.2 million, which is expected to be recognized over a weighted-average period of 1.83 years. During the years ended December 31, 2017 and 2016, we recognized compensation expense of $46.4 million and $41.7 million, respectively, for restricted shares. The total fair value of restricted shares that vested during the years ended December 31, 2017 and 2016 was $59.5 million and $58.5 million, respectively.

**Income Taxes**

We recognized income tax expense for the year ended December 31, 2017 of $188.1 million reflecting an effective tax rate of 32.7%, compared to $261.1 million for the year ended December 31, 2016 reflecting an effective tax rate of 39.7%.

The decrease in income tax expense for the year ended December 31, 2017, when compared to the previous year was primarily due to the decrease in pretax income during the year, as well as a $15.1 million net tax benefit not previously recorded associated with the reduction from the NYC tax base of net interest income earned on qualified affordable housing and low income community related loans in accordance with legislation enacted in 2015 impacting the 2015 and 2016 tax years. For 2017, the net tax benefit related to qualified affordable housing and low income community related loans is approximately $7.3 million. Current year income tax expense also includes a net tax benefit of $2.0 million related to the impact of recently enacted Federal corporate tax reform primarily related to the revaluation of deferred tax assets and liabilities, partially offset by the tax reform impact on other comprehensive income ("OCI") as a result of a deferred tax asset remeasurement related to the net unrealized loss of our available-for-sale ('AFS") securities. Finally, income tax expense also includes a benefit of $6.5 million related to the vesting of stock-based compensation as a result of the 2017 adoption of the new stock-based compensation standard.

The newly issued ASU 2018-02, *Income Statement –Reporting Comprehensive Income (Topic 220)* provides entities an option to reclassify tax effects stranded in accumulated other comprehensive income as a result of the 2017 Tax Cuts and Jobs Act to retained earnings. Early adoption is permitted as of December 31, 2017, prior to the issuance of the related financial statements. The Company elected not to reclassify as of December 31, 2017. See Note 2(t) for additional information.

Considering the impacts of the recently enacted Federal corporate tax reform, the Bank anticipates its 2018 estimated effective tax rate to be approximately 27 percent.

## Segment Results

On an annual basis, we reevaluate our segment reporting conclusions. Based on our internal operating structure and the relative significance of the specialty finance business, our operations are organized into two reportable segments representing our core businesses – Commercial Banking and Specialty Finance.

Commercial Banking principally consists of commercial real estate lending, commercial and industrial lending, and commercial deposit gathering activities, while Specialty Finance principally consists of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, municipal and national franchise financing and/or leasing. The primary factors considered in determining these reportable segments include the nature of the underlying products and services offered, how products and services are provided to our clients, and our internal operating structure.

The segment information reported uses a "management approach" based on how management organizes its segments for purposes of making operating decisions and assessing performance. The Bank's segment results are intended to reflect each segment as if it were a stand-alone business. Management's accounting process uses various estimates and allocation methodologies to measure the performance of the segments. To determine financial performance for each segment, the Company allocates funding costs and certain non-interest expenses to each segment, as applicable. Management does not consider income tax expense when assessing segment profitability and, therefore, it is not disclosed in the tables below. Instead, the Bank's income tax expense is calculated and evaluated at a consolidated level.

The following table presents the financial data for each reportable segment for the periods presented:

| | *Year ended December 31, 2017* | | | |
|---|---|---|---|---|
| *(in thousands)* | **Commercial Banking** | **Specialty Finance** | **Eliminations (1)** | **Consolidated** |
| Net interest income | $ 1,159,208 | 78,378 | - | 1,237,586 |
| Provision for (recovery of) loan and lease losses | 44,283 | 219,014 | - | 263,297 |
| Total non-interest income | 31,486 | 4,579 | (24) | 36,041 |
| Total non-interest expense | 392,041 | 43,049 | (24) | 435,066 |
| Income (loss) before income taxes | 754,370 | (179,106) | - | 575,264 |
| Total assets | $ 43,388,741 | 4,063,495 | (4,334,516) | 43,117,720 |

(1) Eliminations related to intercompany funding.

| | *Year ended December 31, 2016* | | | |
|---|---|---|---|---|
| *(in thousands)* | **Commercial Banking** | **Specialty Finance** | **Eliminations (1)** | **Consolidated** |
| Net interest income | $ 1,065,872 | 81,370 | - | 1,147,242 |
| Provision for (recovery of) loan and lease losses | (20,174) | 175,948 | - | 155,774 |
| Total non-interest income | 39,293 | 3,491 | (34) | 42,750 |
| Total non-interest expense | 353,481 | 23,324 | (34) | 376,771 |
| Income (loss) before income taxes | 771,858 | (114,411) | - | 657,447 |
| Total assets | $ 39,081,992 | 3,440,329 | (3,474,710) | 39,047,611 |

(1) Eliminations related to intercompany funding.

***Commercial Banking***

Commercial Banking consists principally of commercial real estate lending, commercial and industrial lending, and commercial deposit gathering activities in the New York Metropolitan area.

| | Years ended December 31, | |
|---|---|---|
| *(in thousands)* | **2017** | **2016** |
| Net interest income | $ 1,159,208 | 1,065,872 |
| Provision for (recovery of) loan and lease losses | 44,283 | (20,174) |
| Total non-interest income | 31,486 | 39,293 |
| Total non-interest expense | 392,041 | 353,481 |
| Income (loss) before income taxes | 754,370 | 771,858 |
| Total assets | $ 43,388,741 | 39,081,992 |

Commercial Banking net interest income was $1.16 billion for the year ended December 31, 2017, an increase of $93.3 million, or 8.8%, when compared to $1.07 billion in the prior year. This increase was primarily due to growth in average interest-earning assets, partially offset by an increase in average deposits, a reduction in prepayment penalty income, as well as lower asset yields on our investment portfolio due to the flat yield curve and lower replacement rates, as well as an increase in the funding cost of total deposits and borrowings as a result of an increase in market interest rates.

The provision for loan and lease losses increased $64.5 million, or over 100%, to a $44.3 million reserve build, compared to a $20.2 million reserve release in the prior year. The increase was primarily due to the absence of the 2016 change in estimate related to the commercial real estate portfolio, which resulted in a reserve release of $25.7 million, portfolio growth, as well as an increase in qualitative reserves primarily related to the economic conditions and the loan review qualitative factors. For additional information about this change in estimate, see the discussion of ALLL later in this report, as well as Note 8 to our Consolidated Financial Statements.

Non-interest expense was $392.0 million for the year ended December 31, 2017, an increase of $38.5 million, or 10.9%, when compared to $353.5 million in the prior year. The increase was primarily attributable to an increase in salaries and benefits expense due to the addition of new private client banking teams and an increase in compensation costs driven by the growth of our business. Further contributing is an increase in occupancy and equipment expense, information technology costs and FDIC assessment fees, which were also attributable to the continued growth of our business, as well as an increase in professional fees associated with risk management and compliance related activities.

The increase of $4.31 billion in total assets, or 11.0%, from $39.08 billion as of December 31, 2016 to $43.39 billion as of December 31, 2017 was primarily attributable to growth in our commercial real estate and commercial and industrial loan portfolios.

***Specialty Finance***

Specialty Finance consists principally of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, municipal and national franchise financing and/or leasing. Specialty Finance's clients are located throughout the United States.

| *(in thousands)* | | *Years ended December 31,* **2017** | **2016** |
|---|---|---|---|
| Net interest income | $ | 78,378 | 81,370 |
| Provision for (recovery of) loan and lease losses | | 219,014 | 175,948 |
| Total non-interest income | | 4,579 | 3,491 |
| Total non-interest expense | | 43,049 | 23,324 |
| Income (loss) before income taxes | | (179,106) | (114,411) |
| Total assets | $ | 4,063,495 | 3,440,329 |

Specialty Finance net interest income was $78.4 million for the year ended December 31, 2017, a decrease of $3.0 million when compared to $81.4 million in the prior year. The decrease is primarily attributable to the decline in interest income as a result of an increase in nonaccrual loans, primarily taxi medallion loans.

The provision for loan and lease losses increased $43.1 million, or 24.5%, to $219.0 million for the year ended December 31, 2017 from $175.9 million for the year ended December 31, 2016. The increase was primarily attributable to charge-offs related to the NYC taxi medallion portfolio during 2017 as a result of the collateral value decline and an increase in nonaccrual loans during the current year, partially offset by the absence of the 2016 provision related to the Chicago taxi medallion portfolio. For additional information about the taxi medallion valuation impact to the provision for loan and lease losses, see the discussion of ALLL later in this report, as well as Note 8 to our Consolidated Financial Statements.

Non-interest expense was $43.1 million for the year ended December 31, 2017, an increase of $19.8 million, or 84.6%, when compared to $23.3 million in the prior year. The increase was primarily attributable to repossessed NYC taxi medallion fair value adjustments of $15.0 million for the year ended December 31, 2017.

The increase of $623.2 million in total assets, or 18.1%, from $3.44 billion as of December 31, 2016 to $4.06 billion as of December 31, 2017 was primarily attributable to growth in our equipment leasing portfolios, partially offset by the reduction of taxi medallion balances due to charge-offs and the application of principal and interest payments to the related nonaccrual loan balances.

***Financial Condition***

**Securities Portfolio**

Securities in our investment portfolio are designated as either available-for-sale ("AFS") or held-to-maturity ("HTM") based upon various factors, including asset/liability management strategies, liquidity and profitability objectives and regulatory requirements. AFS securities may be sold prior to maturity, based upon asset/liability management decisions and are carried at fair value. Unrealized gains or losses on AFS securities are recorded in accumulated other comprehensive income (loss), net of tax, in shareholders' equity. HTM securities are carried at cost and adjusted for amortization of premiums or accretion of discounts. Other-than-temporary impairment losses on AFS and HTM debt securities attributable to credit losses are recorded in current earnings, while losses attributable to noncredit factors are recorded in accumulated other comprehensive income (loss). Amortization of premiums and accretion of discounts on mortgage-backed securities are periodically adjusted for estimated prepayments.

At December 31, 2018, our total securities portfolio was $9.19 billion and primarily consisted of mortgage-backed securities ("MBSs") and collateralized mortgage obligations ("CMOs") issued by U.S. Government agencies ($497.5 million), government-sponsored enterprises ($7.10 billion), and private issuers ($472.6 million). As of December 31, 2018, 92.8% of our securities portfolio had a AAA credit rating, 97.3% had a credit rating of A or better, and 99.2% was rated investment grade or better. Overall, our securities portfolio had a weighted average duration of 3.33 years and a weighted average life of 4.92 years as of December 31, 2018. For further discussion of our investment securities and the related determination of fair value, see Notes 3 and 4 to our Consolidated Financial Statements.

The agency MBS portfolio primarily consists of adjustable-rate hybrid securities, fixed-rate balloon and seasoned 15-year structures. The agency CMO portion of our portfolio primarily consists of short duration planned amortization and sequential structures, collateralized by conforming first lien residential mortgages. The private CMO portfolio consists of prime borrowers with seasoned underlying mortgages and supportive credit enhancement. Our asset-backed portfolio primarily consists of intermediate term fixed rate AAA and floating rate AA/A rated credit card, auto and home equity collateralized securities and collateralized debt obligations

At December 31, 2018, the net unrealized loss on securities, net of tax effect, was $142.2 million as reflected in accumulated other comprehensive loss, compared to a net unrealized loss of $68.9 million at December 31, 2017. The fair value of our AFS securities is affected by several factors, including (i) credit spreads, (ii) the interest rate environment, (iii) unemployment rates, (iv) delinquencies and defaults on the mortgages underlying such obligations, (v) changes in interest rates resulting from expiration of the fixed rate portion of adjustable rate mortgages, (vi) changing home prices, (vii) market liquidity for such obligations, and (viii) uncertainties with respect to government-sponsored enterprises such as Fannie Mae and Freddie Mac, which guarantee many of the debt securities we own. The estimated effect of possible changes in interest rates on our earnings and equity is discussed in "Item 7A. Quantitative and Qualitative Disclosures About Market Risk."

On December 10, 2013, federal regulators issued a final rule implementing the "Volcker Rule" enacted as part of the Dodd-Frank Act. The Volcker Rule prohibits banking organizations and their affiliates from investing in and sponsoring certain types of funds, including a range of asset securitization structures, that do not meet the exemptive criteria for continued ownership (defined as "Covered Funds"). The Federal Reserve previously exercised its authority to extend the divestiture period for such pre-2014 investments to July 21, 2017. The Bank had limited activities that were impacted by the Volcker Rule, and the only prohibited activity related to our holding of certain AFS securities in investment vehicles that met the definition of Covered Funds. These Covered Funds securities were either divested by the divestiture deadline in July 2017 or shortly thereafter with the exception of one private CMO re-REMIC security which was written off in the first quarter of 2018, leaving the Bank zero exposure to Covered Funds securities since that time.

The following table summarizes the components of our securities portfolios as of the dates indicated:

| | December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2018 | | 2017 | | 2016 | |
| (in thousands) | **Amortized Cost** | **Fair Value** | **Amortized Cost** | **Fair Value** | **Amortized Cost** | **Fair Value** |
| **AVAILABLE-FOR-SALE** | | | | | | |
| U.S. Treasury securities | $ 32,954 | 32,894 | 24,831 | 24,726 | 2,000 | 1,999 |
| Residential mortgage-backed securities: | | | | | | |
| U.S. Government Agency | 44,196 | 43,707 | 32,260 | 32,282 | 14,443 | 14,893 |
| Government-sponsored enterprises | 1,558,689 | 1,513,294 | 1,505,352 | 1,494,890 | 1,352,441 | 1,350,423 |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 244,772 | 239,343 | 249,906 | 245,724 | 332,886 | 332,042 |
| Government-sponsored enterprises | 3,984,361 | 3,889,617 | 3,787,233 | 3,713,775 | 3,451,257 | 3,403,766 |
| Private | 478,399 | 470,132 | 401,343 | 399,684 | 389,722 | 383,798 |
| Securities of U.S. states and political subdivisions: | | | | | | |
| Municipal Bond - Taxable | 6,692 | 6,554 | 7,506 | 7,550 | 8,556 | 8,349 |
| Other debt securities: | | | | | | |
| Commercial mortgage-backed securities | 111,409 | 109,988 | 127,791 | 128,213 | 149,862 | 151,201 |
| Single issuer trust preferred & corporate debt securities | 450,305 | 444,324 | 398,157 | 400,823 | 403,668 | 402,888 |
| Pooled trust preferred securities | 20,675 | 20,928 | 21,159 | 18,356 | 25,315 | 17,084 |
| Collateralized debt obligations | - | - | - | - | 4,457 | 5,541 |
| Other | 554,354 | 530,823 | 474,691 | 466,636 | 250,689 | 242,696 |
| Equity securities (1) | - | - | 22,243 | 21,060 | 21,731 | 20,667 |
| Total available-for-sale | $7,486,806 | 7,301,604 | 7,052,472 | 6,953,719 | 6,407,027 | 6,335,347 |
| **HELD-TO-MATURITY** | | | | | | |
| Residential mortgage-backed securities: | | | | | | |
| U.S. Government Agency | $ 35,566 | 34,424 | 43,322 | 43,197 | 5,286 | 5,213 |
| Government-sponsored enterprises | 335,969 | 325,912 | 378,149 | 376,570 | 416,415 | 416,196 |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 178,851 | 173,139 | 207,027 | 203,631 | 248,699 | 246,943 |
| Government-sponsored enterprises | 1,264,876 | 1,241,933 | 1,297,857 | 1,284,875 | 1,295,413 | 1,284,240 |
| Private | 2,437 | 2,453 | 2,985 | 3,002 | 3,652 | 3,357 |
| Other debt securities: | | | | | | |
| Commercial mortgage-backed securities | 17,570 | 17,542 | 17,916 | 18,206 | 17,994 | 18,739 |
| Single issuer trust preferred & corporate debt securities | 48,257 | 49,788 | 48,529 | 52,980 | 48,800 | 50,813 |
| Other | 7 | 7 | 591 | 626 | 1,866 | 1,892 |
| Total held-to-maturity | $1,883,533 | 1,845,198 | 1,996,376 | 1,983,087 | 2,038,125 | 2,027,393 |

(1) Equity securities represent Community Reinvestment Act ("CRA") qualifying closed-end bond fund investments. Effective January 1, 2018, we adopted ASU 2016-01 (Amendments to Financial Instruments- Recognition and Measurement of Financial Assets). Accordingly, we reclassified CRA securities from the available-for-sale category to other assets.

The following table presents the credit rating distribution of our securities portfolio as of December 31, 2018:

| Credit Rating | Percentage of Portfolio |
|---|---|
| AAA | 92.80% |
| AA | 1.38% |
| A | 3.07% |
| BBB | 1.93% |
| Below BBB | 0.82% |
| Total | 100.00% |

The following table provides the estimated change in fair value of our debt securities for various interest rate shocks as of December 31, 2018:

| Interest Rate Shock | Estimated Fair Value Change |
|---|---|
| -100 basis points | 3.36% |
| +100 basis points | (4.50%) |
| +200 basis points | (9.33%) |
| +300 basis points | (14.09%) |
| +400 basis points | (18.72%) |

The following table presents the contractual maturity distribution and the weighted average yields of our combined AFS and HTM securities portfolios as of December 31, 2018. Due to prepayments of collateral underlying the securities, actual maturity may differ from contractual maturity.

| *(dollars in thousands)* | | Amortized Cost | Fair Value | Average Yield |
|---|---|---|---|---|
| Less than one year | | | | |
| U.S. Treasury securities | $ | 9,994 | 9,908 | 1.48% |
| Mortgage-backed securities | | 10 | 10 | 5.07% |
| Collateralized mortgage obligations | | 345 | 358 | 5.35% |
| Other securities | | 557,397 | 533,246 | 4.33% |
| Total | $ | 567,746 | 543,522 | 4.29% |
| One year to less than five years | | | | |
| U.S. Treasury securities | $ | 22,960 | 22,986 | 2.63% |
| Mortgage-backed securities | | 3 | 3 | 6.00% |
| Collateralized mortgage obligations | | 6,426 | 6,447 | 3.13% |
| Other securities | | 304,239 | 302,720 | 3.63% |
| Total | $ | 333,628 | 332,156 | 3.55% |
| Five years to less than 10 years | | | | |
| Mortgage-backed securities | $ | 3,418 | 3,438 | 3.34% |
| Collateralized mortgage obligations | | 156,140 | 154,032 | 3.10% |
| Other securities | | 189,810 | 185,158 | 3.91% |
| Total | $ | 349,368 | 342,628 | 3.54% |
| 10 years and longer | | | | |
| Mortgage-backed securities | $ | 1,970,989 | 1,913,886 | 3.00% |
| Collateralized mortgage obligations | | 5,990,785 | 5,855,780 | 2.99% |
| Securities of U.S. states and political subdivisions | | 6,692 | 6,554 | 3.25% |
| Other securities | | 151,131 | 152,276 | 4.51% |
| Total | $ | 8,119,597 | 7,928,496 | 3.02% |
| All maturities | | | | |
| U.S. Treasury securities | $ | 32,954 | 32,894 | 2.28% |
| Mortgage-backed securities | | 1,974,420 | 1,917,337 | 3.00% |
| Collateralized mortgage obligations | | 6,153,696 | 6,016,617 | 2.99% |
| Securities of U.S. states and political subdivisions | | 6,692 | 6,554 | 3.25% |
| Other securities | | 1,202,577 | 1,173,400 | 4.11% |
| Total | $ | 9,370,339 | 9,146,802 | 3.13% |

**Loan Portfolio**

The following table presents information regarding the composition of our loan portfolio, including loans held for sale, as of the dates indicated:

| | *December 31,* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *2018* | | *2017* | | *2016* | | *2015* | | *2014* | |
| *(dollars in thousands)* | **Amount** | **%** | **Amount** | **%** | **Amount** | **%** | **Amount** | **%** | **Amount** | **%** |
| Mortgage loans: | | | | | | | | | | |
| Multi-family residential property | $ 15,688,481 | 42.59% | 14,512,051 | 44.03% | 13,504,619 | 45.74% | 11,201,592 | 46.33% | 8,380,473 | 45.73% |
| Commercial property | 10,309,837 | 27.99% | 8,902,027 | 27.00% | 7,606,868 | 25.77% | 6,109,635 | 25.27% | 4,188,042 | 22.85% |
| 1-4 family residential property | 620,486 | 1.68% | 621,377 | 1.88% | 529,228 | 1.79% | 533,416 | 2.21% | 463,420 | 2.53% |
| Home equity lines of credit | 116,272 | 0.32% | 133,268 | 0.40% | 148,094 | 0.50% | 163,191 | 0.68% | 160,890 | 0.88% |
| Acquisition, development and construction loans | 1,656,467 | 4.50% | 2,018,901 | 6.12% | 1,799,848 | 6.10% | 1,009,666 | 4.18% | 428,668 | 2.34% |
| Other loans: | | | | | | | | | | |
| Commercial and industrial | 7,993,999 | 21.70% | 6,380,111 | 19.35% | 5,420,534 | 18.36% | 4,745,821 | 19.63% | 4,206,478 | 22.95% |
| Commercial - SBA guaranteed portion | 442,078 | 1.20% | 387,012 | 1.17% | 502,240 | 1.70% | 401,084 | 1.66% | 486,750 | 2.66% |
| Consumer | 9,038 | 0.02% | 15,310 | 0.05% | 10,268 | 0.04% | 9,714 | 0.04% | 10,245 | 0.06% |
| Sub-total / Total | 36,836,658 | 100.00% | 32,970,057 | 100.00% | 29,521,699 | 100.00% | 24,174,119 | 100.00% | 18,324,966 | 100.00% |
| Premiums, deferred fees and costs | 71,774 | | 74,759 | | 80,994 | | 74,803 | | 81,039 | |
| Total | $ 36,908,432 | | 33,044,816 | | 29,602,693 | | 24,248,922 | | 18,406,005 | |

Total loans increased by $3.86 billion to $36.91 billion at December 31, 2018 from $33.04 billion at December 31, 2017. Our total loan-to-deposit ratio, excluding loans held for sale, increased to 100.1% at December 31, 2018 from 97.5% at December 31, 2017.

Beginning in 2017, to better align with recent regulatory guidance, the Bank began using the acquisition, development and construction caption. Historically, only construction loans were reported within this line. The Bank reviewed its loan portfolio in 2017 to identify acquisition and development loans. Therefore, certain loans were reclassified from other categories and included with construction loans as acquisition, development and construction loans. These loans were also reclassified in the prior periods. The amounts reclassified were $1.31 billion, $933.7 million and $363.8 million, as of December 31, 2016, 2015 and 2014, respectively.

Additionally, in 2015, to better conform with our underwriting processes and industry practice, loans secured, in part, by owner-occupied commercial properties were reclassified from commercial property loans to commercial and industrial loans, as the primary collateral for these loans consists of cash flow from the borrower's business. The amounts reclassified were $619.9 million and $545.0 million as of December 31, 2015 and 2014, respectively.

Substantially all of the collateral for our loans secured by real estate is located within the New York metropolitan area. As a result, our financial condition and results of operations may be affected by changes in the economy and the real estate market of the New York metropolitan area. A prolonged period of economic recession or other adverse economic conditions in the New York metropolitan area may result in an increase in nonpayment of loans, a decrease in collateral value, and an increase in our ALLL.

We only securitize the U.S. Government guaranteed portion of SBA loans, and we have not securitized any of our loans secured by real estate. As a result, we have not made any representations to, and do not have obligations to, third-party purchasers regarding any such loans.

At December 31, 2018, loans fully secured by cash and marketable securities represented 0.4% of outstanding loan balances. The SBA portfolio, consisting only of the guaranteed portion of the SBA loans, represented 1.1% of outstanding loan balances. Our fully unsecured loan portfolio represented 1.8% of our total outstanding loan portfolio at December 31, 2018. We generally limit unsecured lending for consumer loans to private clients who we believe possess ample net worth, liquidity and repayment capacity. The remainder of our loan portfolio is secured by real estate, company assets, personal assets and other forms of collateral.

In order to manage credit quality, we view the Bank's loan portfolio by various segments and classes of loans. For commercial loans, we assign individual credit ratings ranging from 1 (lowest risk) to 9 (highest risk) as an indicator of credit quality. These ratings are based on specific risk factors, including (i) historical and projected financial results of the borrower, (ii) market conditions of the borrower's industry that may affect the borrower's future financial performance, (iii) business experience of the borrower's management, (iv) nature of the underlying collateral, if any, and (v) history of the borrower's payment performance. See Note 7 to our Consolidated Financial Statements for the summary of our portfolio of commercial loans by credit rating as of December 31, 2018 and 2017.

For consumer loans, including residential mortgages and home equity lines of credit, we consider the borrower's payment history and current payment performance as leading indicators of credit quality. Effective January 2016, we no longer originate personal residential mortgages and home equity lines of credit, though we continue to service the existing portfolios. A consumer loan is considered nonperforming generally when it becomes 90 days delinquent based on contractual terms, at which time the accrual of interest income is discontinued. In the case of residential mortgages and home equity lines of credit, exceptions may be made if the loan has sufficient collateral value, based on a current appraisal, and is in process of collection.

The following table summarizes our portfolio of consumer loans by performance status as of the dates indicated:

| *(in thousands)* | | **Performing** | **Nonperforming** | **Total** |
|---|---|---|---|---|
| **December 31, 2018** | | | | |
| Residential mortgages | $ | 87,848 | 3,033 | 90,881 |
| Home equity lines of credit | | 112,799 | 3,473 | 116,272 |
| Other consumer loans | | 9,038 | - | 9,038 |
| Total consumer loans | $ | 209,685 | 6,506 | 216,191 |
| **December 31, 2017** | | | | |
| Residential mortgages | $ | 103,825 | 1,135 | 104,960 |
| Home equity lines of credit | | 129,376 | 3,892 | 133,268 |
| Other consumer loans | | 15,310 | - | 15,310 |
| Total consumer loans | $ | 248,511 | 5,027 | 253,538 |

The following table presents commercial and industrial loans and acquisition, development and construction loans by maturity for the period indicated:

| | *As of December 31, 2018* | | | | |
|---|---|---|---|---|---|
| *(in thousands)* | | **Within One Year** | **One to Five Years** | **After Five Years** | **Total** |
| Loan Type | | | | | |
| Commercial and industrial | $ | 1,224,320 | 5,106,268 | 1,663,411 | 7,993,999 |
| Acquistion, development and construction loans | | 710,802 | 505,273 | 440,392 | 1,656,467 |
| Total | $ | 1,935,122 | 5,611,541 | 2,103,803 | 9,650,466 |

The following table presents commercial and industrial loans and acquisition, development and construction loans at fixed and variable rates contractually maturing after December 31, 2019:

| *(in thousands)* | *Maturing After December 31, 2019* Fixed | Variable | Total |
|---|---|---|---|
| Loan Type | | | |
| Commercial and industrial | $ 4,858,946 | 1,910,733 | 6,769,679 |
| Acquistion, development and construction loans | 881,627 | 64,038 | 945,665 |
| Total | $ 5,740,573 | 1,974,771 | 7,715,344 |

**Asset Quality**

*Nonperforming Assets*

Nonperforming assets include nonaccrual loans and investment securities as well as other real estate owned and other repossessed assets. Loans are generally placed on nonaccrual status upon becoming 90 days past due, or three months delinquent for single family property loans, based on contractual terms. In the case of commercial loans and loans secured by real estate, exceptions may be made if the loan has sufficient collateral value, based on a current appraisal, and is in process of collection. Consumer loans that are not secured by real estate, however, are generally placed on nonaccrual status when deemed uncollectible; such loans are generally charged off when they reach 180 days past due. Additionally, other considerations are made in determining whether a loan should be classified as nonaccrual, including whether the loan is to a borrower in an industry experiencing economic stress, whether the borrower is experiencing other issues such as inadequate cash-flow, or the nature of the underlying collateral and whether it is susceptible to deterioration in realizable value.

At the time a loan is placed on nonaccrual status, the accrued but uncollected interest receivable is reversed and accounted for on a cash basis or cost recovery basis, until qualifying for return to accrual status. Management's classification of a loan as nonaccrual does not necessarily indicate that the principal of the loan is uncollectible in whole or in part.

The following table summarizes our nonperforming assets, accruing troubled debt restructured loans, loans that were 90 days past due as to principal or interest, other impaired loans, and certain asset quality indicators as of the dates indicated:

| | December 31, | | | | |
|---|---|---|---|---|---|
| *(dollars in thousands)* | **2018** | **2017** | **2016** | **2015** | **2014** |
| Nonaccrual assets: | | | | | |
| Loans | | | | | |
| Taxi medallions | $ 15,904 | 121,464 | 85,357 | 28,755 | - |
| Other | 13,868 | 13,297 | 15,086 | 17,651 | 13,843 |
| Troubled debt restructured loans | | | | | |
| Taxi medallions | 72,607 | 188,430 | 50,010 | 20,354 | - |
| Other | 6,273 | 3,727 | 7,125 | 5,145 | 7,165 |
| Investment securities, at fair value | 275 | 75 | 662 | 629 | 948 |
| Other repossessed assets | | | | | |
| Taxi medallions | 49,660 | 28,583 | 19,580 | 1,872 | - |
| Other | 1,939 | 250 | 53 | 454 | 245 |
| Total nonperforming assets | $ 160,526 | 355,826 | 177,873 | 74,860 | 22,201 |
| Accruing troubled debt restructured loans | $ 55,288 | 28,106 | 88,158 | 160,899 | 36,125 |
| Accruing loans past due 90 days or more (1): | | | | | |
| Loans (2) | $ 7,833 | 6,331 | 55,951 | 3,525 | 1,839 |
| Loans held for sale (3) | $ 922 | 37 | 795 | 2,436 | 1,407 |
| Other taxi medallion loans 30-89 days past due maturity (4) | $ - | - | 24,564 | 4,939 | - |
| Asset Quality Ratios: | | | | | |
| Total nonaccrual loans to total loans | 0.30% | 1.00% | 0.54% | 0.30% | 0.12% |
| Total nonperforming assets to total assets | 0.34% | 0.83% | 0.46% | 0.22% | 0.08% |
| ALLL to nonaccrual loans | 211.69% | 59.94% | 135.49% | 271.22% | 782.52% |

(1) See Note 7 for full delinquency status of our loan portfolio.

(2) Includes $45.3 million of taxi medallion loans past due maturity of 90 days or more that were considered impaired as December 31, 2016. The balances in all other periods do not contain impaired loans.

(3) Accruing loans held for sale past due 90 days or more are comprised of U.S. Government guaranteed SBA loans.

(4) Considered impaired as of December 31, 2016.

Significant nonaccrual loans at December 31, 2018 consisted of $88.5 million in loans secured by taxi medallions (commercial and industrial loans), comprised of 460 New York City medallion related loans totaling $72.6 million, 248 Chicago medallion related loans totaling $15.6 million and five Philadelphia medallion related loans totaling $319,000. Other significant nonaccrual loans include three commercial and industrial loans totaling $4.0 million, two loans secured by 1-4 family residential property totaling $3.3 million, and four home equity lines of credit totaling $2.6 million. Each nonaccrual loan is being actively managed by the Bank, and the ALLL includes a specific allocation for each such loan, when appropriate.

Significant nonaccrual loans at December 31, 2017 consisted of $309.9 million in loans secured by taxi medallions (commercial and industrial loans), comprised of 789 New York City medallion related loans totaling $276.8 million, 293 Chicago medallion related loans totaling $32.5 million and five Philadelphia medallion related loans totaling $585,000. During 2017, all remaining taxi medallion loans were placed on nonaccrual as a result of the significant decline in the underlying NYC taxi medallion collateral value. Due to the decline in collateral values, management determined the collectability of all amounts due to be doubtful and portions of loans uncollectable to the extent not covered by the underlying collateral value. Other significant nonaccrual loans include six commercial and industrial loans totaling $6.2 million, three commercial real estate loans totaling $3.4 million, and four home equity lines of credit totaling $2.3 million. Each nonaccrual loan is being actively managed by the Bank, and the ALLL included a specific allocation for each such loan, when appropriate.

Nonaccrual investment securities at December 31, 2018 consisted of one bank-collateralized pooled trust preferred security totaling $275,000. This security is classified as nonperforming because of delinquent payments as a result of payment deferrals. Nonaccrual investment securities at December 31, 2017 consisted of one bank-collateralized pooled trust preferred security totaling $75,000. This security was classified as nonperforming because of delinquent payments as a result of payment deferrals.

At December 31, 2018, loans past due 90 days or more and accruing included one commercial real estate loan totaling $5.0 million and six commercial and industrial loans totaling $2.0 million that are well secured and in process of collection. At December 31, 2017, loans past due 90 days or more included 14 commercial and industrial loans totaling $3.3 million, four loans secured by 1-4 family residential property totaling $2.3 million, and one commercial real estate loan for $559,000 that were well secured and in process of collection.

The $86.1 million decrease in TDRs from $220.3 million as of December 31, 2017 to $134.2 million as of December 31, 2018, was primarily driven by taxi medallion charge-offs of $49.9 million as a result of further significant declines in the underlying collateral fair value in the first quarter of 2018, the foreclosure of taxi medallion loans totaling $30.4 million, taxi medallion loan payoffs totaling $35.0 million, continued payment reductions for existing TDRs totaling $13.7 million, and other loan portfolio TDR payoffs of $11.8 million. This was partially offset by the restructure of 94 taxi medallion loans totaling $14.7 million, 22 other commercial and industrial loans totaling $33.9 million, one commercial real estate loan totaling $9.6 million, and one home equity line of credit totaling $1.0 million.

For economic reasons and to maximize the recovery of loans, we may work with borrowers experiencing financial difficulties and will consider modifications to a borrower's existing loan terms and conditions that we would not otherwise consider, commonly referred to as TDRs. Our TDRs consist of those loans where we modify the contractual terms of the loan, such as (i) a deferral of the loan's principal amortization through either interest-only or reduced principal payments, (ii) a reduction in the loan's contractual interest rate, (iii) principal forgiveness or (iv) an extension of the loan's contractual term. For a summary of our accounting methodologies relating to TDRs, see the Allowance for Loan and Lease Losses section of our Critical Accounting Policies. Additionally, for a discussion of our TDRs and the related financial effects, see Note 8 to our Consolidated Financial Statements.

Our repossessed assets as of December 31, 2018 and December 31, 2017 totaled $51.6 million and $28.8 million, respectively. The increase is primarily driven by the repossession of taxi medallions during the year with a fair value of $31.4 million. Further contributing to the increase is the impact of the reclassification of certain nonaccrual loans in conjunction with the adoption of ASU 2014-09, *Revenue from Contracts with Customers*, which resulted in an increase of $5.6 million. Of the total $37.0 million of taxi medallion repossessed assets added in 2018 and in accordance with ASU 2014-09, $19.1 million are legal sales that cannot be derecognized as they were Bank financed and uncertainty exists regarding collectability. See Note 2(t) for additional information regarding the adoption of ASU 2014-09. The increase is partially offset by $4.2 million of fair value adjustments and the sale of $12.0 million of repossessed medallions during the year.

As of December 31, 2018, repossessed assets included taxi medallions totaling $27.4 million that were sold to new borrowers with financing provided by the Bank. While these are legal sales to the new borrower, because they are Bank-financed and uncertainty exists regarding collectability, the repossessed assets cannot be derecognized under the new revenue recognition accounting standard adopted in 2018. Ongoing principal and interest payments associated with these transactions continue to be collected and are recorded in Accrued expenses and other liabilities. As of December 31, 2018, $5.6 million of payments have been received to date leaving the remaining net exposure for these medallions at $21.8 million. See Note 2(t) for additional information regarding the adoption of this new revenue recognition accounting standard.

*Allowance for Loan and Lease Losses*

Our ALLL is maintained at a level estimated by management to absorb probable losses inherent in the loan portfolio and is based on management's continuing evaluation of the portfolio, the related risk characteristics, and the overall economic conditions affecting the loan portfolio. The estimation is inherently subjective as it requires measurements that are susceptible to significant revision as more information becomes available. At December 31, 2018, 2017, and 2016, our ALLL totaled $230.0 million, $196.0 million, and $213.5 million, respectively, which represents 0.63%, 0.60%, and 0.74% of total loans and leases (excluding loans held for sale), respectively. For a summary of our accounting methodologies relating to the ALLL, see the Allowance for Loan and Lease Losses section of our Critical Accounting Policies.

The provision for loan and lease losses is a charge to earnings to maintain the ALLL at a level consistent with management's assessment of the loan portfolio in light of current economic conditions and market trends. For the years ended December 31, 2018, 2017, and 2016, we recorded provisions of $162.5 million, $263.3 million, and $155.8 million, respectively. These provisions were made to reflect management's assessment of the inherent and specific risk of losses relative to the growth of the portfolio.

The decrease in the provision for the year ended December 31, 2018, when compared to the prior year, was primarily due to the decline in taxi medallion charge-offs, partially offset by loan portfolio growth across all major portfolios, as well as an increase in the commercial and industrial and specialty finance qualitative reserves as a result of the changes in economic and business condition metrics over the last year.

Over the last three years, the NYC and Chicago taxi medallion markets had been distressed and the underlying collateral values had declined as a result of elevated risk premiums and the absence of new financing. However, in Chicago, since the third quarter of 2017 transfer volumes have been consistent with historical levels and transfer values are relatively stable. Therefore, the Bank has been exclusively utilizing observable public transfer data to measure the related fair value of the underlying Chicago taxi medallions.

In NYC, during the first quarter of 2018, numerous transactions were noted ranging from approximately $120,000 to $400,000 and both revenues and observable market transfers declined significantly. Because the declines over a short period were substantial, and based on other trends within the market providing additional evidence of market illiquidity and deterioration at that time, management felt it necessary to reassess its inputs and assumptions. Following that review, most notably, management recalibrated its discount rate and growth rate assumptions within its discounted cash flow model and began to weight cash sales more heavily when evaluating observable transfers. Also reflected in the updated assumptions in the first quarter of 2018 were failed auction activity and a significant increase in medallion supply due to anticipated credit union sales and/or auctions in the first quarter of 2018. Both transfer prices and the discounted cash flow model valuation output were weighted to derive an estimated fair value of $160,000, net of selling costs, which represented a significant decline from the December 31, 2017.

Since then, the NYC Taxi & Limousine Commission (TLC) trip data has shown stabilization in revenue per medallion, and transfer values have been relatively consistent. Therefore, the associated fair value has also remained stable. In the fourth quarter, TLC trip data again supported stabilization. However, management noted a recent increase and sustained level in observable market transfer volumes, as well as similar trends in our own medallion sales activity. In fact, approximately 40% of the TLC published transfers in the fourth quarter of 2018 are our own cash or financed sales. This represented a significant change from prior quarterly trends. Therefore, in the fourth quarter, management changed its methodology from a weighted cash flow and observable data calculation, to a full weight of observable transfers.

Management placed significant weight on our own transaction prices given transparency into our own deal terms. Pursuant to ASC 820, *Fair Value Measurement,* the transaction prices utilized in the valuation also considered any transaction price adjustments necessary. Non-Signature transfers were also incorporated into the valuation. For non-Signature transactions, since we lack transparency into the deal terms, management determined the need to apply estimated transaction price adjustments for consistency purposes as the presumption is certain term concessions were likely. When considering all transfer levels, the estimated NYC taxi medallion fair value as of December 31, 2018 was $160,000 net of selling costs, which is again consistent with the first quarter of 2018 valuation. See Note 8 for additional information.

The following table presents our ALLL and outstanding loan balances by segment of our loan portfolio, based on the methodology followed in determining the ALLL:

| | Credit-rated loans | | | Non-rated loans | | | |
|---|---|---|---|---|---|---|---|
| *(in thousands)* | Commercial Real Estate | 1-4 Family Residential Property | Commercial & Industrial | Commercial | Residential Mortgages (1) | Consumer | Total |
| **As of December 31, 2018** | | | | | | | |
| ALLL: | | | | | | | |
| Individually evaluated for impairment | $ 135 | 630 | 5,112 | 5 | 2,333 | - | 8,215 |
| Collectively evaluated for impairment | 175,496 | 1,904 | 42,501 | 1,190 | 592 | 107 | 221,790 |
| Recorded investment in loans: | | | | | | | |
| Individually evaluated for impairment | 13,411 | 5,502 | 137,510 | 9 | 7,508 | - | 163,940 |
| Collectively evaluated for impairment | 27,640,691 | 524,786 | 7,801,140 | 55,340 | 199,645 | 9,038 | 36,230,640 |
| **As of December 31, 2017** | | | | | | | |
| ALLL: | | | | | | | |
| Individually evaluated for impairment | $ - | - | 3,960 | 37 | 2,139 | - | 6,136 |
| Collectively evaluated for impairment | 151,680 | 1,521 | 34,325 | 1,516 | 645 | 136 | 189,823 |
| Recorded investment in loans: | | | | | | | |
| Individually evaluated for impairment | 9,961 | 4,236 | 335,727 | 74 | 5,026 | - | 355,024 |
| Collectively evaluated for impairment | 25,423,018 | 512,181 | 5,984,019 | 60,291 | 233,202 | 15,310 | 32,228,021 |

(1) Includes home equity lines of credit.

The following table allocates our ALLL to the respective portfolio categories and includes the percentage of loans in each category to total loans at the dates indicated:

| | December 31, | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2018 | | 2017 | | 2016 | | 2015 | | 2014 | |
| *(dollars in thousands)* | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| Mortgage Loans: | | | | | | | | | | |
| Multi-family residential property | $ 99,964 | 43.11% | 82,554 | 44.54% | 63,855 | 46.54% | 77,366 | 47.12% | 61,398 | 46.98% |
| Commercial property | 63,328 | 28.33% | 53,283 | 27.32% | 38,761 | 26.21% | 43,295 | 25.70% | 32,169 | 23.48% |
| 1-4 family residential property | 3,424 | 1.70% | 2,311 | 1.91% | 2,107 | 1.82% | 3,573 | 2.24% | 7,178 | 2.60% |
| Home equity lines of credit | 2,035 | 0.32% | 1,994 | 0.41% | 3,182 | 0.51% | 4,931 | 0.69% | 3,522 | 0.90% |
| Acquistion, development and construction | 12,339 | 4.56% | 15,844 | 6.19% | 11,966 | 6.20% | 8,018 | 4.25% | 3,358 | 2.40% |
| Other loans: | | | | | | | | | | |
| Commercial and industrial | 47,257 | 21.72% | 39,837 | 18.63% | 35,159 | 16.52% | 34,334 | 16.62% | 47,924 | 19.04% |
| New York City taxi medallions | - | 0.20% | - | 0.85% | 44,319 | 1.96% | 14,536 | 2.60% | 3,841 | 3.52% |
| Chicago taxi medallions | 1,538 | 0.04% | - | 0.10% | 12,152 | 0.19% | 8,107 | 0.71% | 4,502 | 0.98% |
| Philadelphia taxi medallions | 13 | 0.00% | - | 0.00% | 1,797 | 0.01% | 522 | 0.03% | 42 | 0.04% |
| Consumer | 107 | 0.02% | 136 | 0.05% | 197 | 0.04% | 341 | 0.04% | 458 | 0.06% |
| Total | $ 230,005 | 100.00% | 195,959 | 100.00% | 213,495 | 100.00% | 195,023 | 100.00% | 164,392 | 100.00% |

*Summary of Loan Loss Experience*

The following table presents a summary by loan portfolio segment of our ALLL, loan loss experience, and provision for loan and lease losses for the periods indicated:

| | Years ended December 31, | | | | |
|---|---|---|---|---|---|
| *(dollars in thousands)* | 2018 | 2017 | 2016 | 2015 | 2014 |
| Beginning balance - ALLL | $ 195,959 | 213,495 | 195,023 | 164,392 | 135,071 |
| Charge-offs: | | | | | |
| Credit-rated commercial loans | (140,323) | (282,600) | (141,981) | (19,732) | (4,586) |
| Non-rated commercial loans | (797) | (1,148) | (1,041) | (1,209) | (1,297) |
| Residential mortgages | (641) | (571) | (151) | (1,103) | (1,597) |
| Consumer loans | (206) | (218) | (195) | (186) | (380) |
| Total charge-offs | (141,967) | (284,537) | (143,368) | (22,230) | (7,860) |
| Recoveries: | | | | | |
| Credit-rated commercial loans | 12,822 | 2,954 | 5,152 | 5,950 | 4,764 |
| Non-rated commercial loans | 552 | 573 | 812 | 1,171 | 701 |
| Residential mortgages | 38 | 76 | 21 | 656 | 460 |
| Consumer loans | 77 | 101 | 81 | 170 | 146 |
| Total recoveries | 13,489 | 3,704 | 6,066 | 7,947 | 6,071 |
| Net charge-offs | (128,478) | (280,833) | (137,302) | (14,283) | (1,789) |
| Provision | 162,524 | 263,297 | 155,774 | 44,914 | 31,110 |
| Ending balance - ALLL | $ 230,005 | 195,959 | 213,495 | 195,023 | 164,392 |
| Ratios: | | | | | |
| ALLL to total loans | 0.63% | 0.60% | 0.74% | 0.82% | 0.92% |
| Net charge-offs to average loans | 0.38% | 0.92% | 0.52% | 0.07% | 0.01% |

Our net charge-offs during 2018 decreased to $128.5 million compared to $280.8 million for the prior year. Net charge-offs for both periods were nearly all attributable to the NYC taxi medallion portfolio.

**Net Deferred Tax Asset**

The following table presents the components of our net deferred tax asset (liability) as of the dates indicated:

| (in thousands) | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **DEFERRED TAX ASSETS** | | |
| Allowance for loan and lease losses | $ 67,977 | 56,587 |
| Income on leased assets | 82,204 | 57,253 |
| Unearned compensation - restricted stock | 11,583 | 10,917 |
| Repossessed taxi medallion valuation reserve | 10,843 | 4,519 |
| Write-down for other-than-temporary impairment of securities | 3,734 | 3,763 |
| Depreciation - ordinary | 2,439 | 17 |
| Other | 4,466 | 3,086 |
| Total deferred tax assets recognized in earnings | 183,246 | 136,142 |
| Net unrealized losses on securities available-for-sale | 44,022 | 29,275 |
| Net unrealized losses on securities transferred to held-to-maturity | 2,512 | 5,440 |
| Total deferred tax assets | 229,780 | 170,857 |
| **DEFERRED TAX LIABILITIES** | | |
| Depreciation - leased assets | 207,593 | 136,581 |
| Prepaid expenses | 818 | 755 |
| Deferred income | - | 23,967 |
| Other | 11,939 | 11,535 |
| Total deferred tax liabilities | 220,350 | 172,838 |
| Net deferred tax asset (liability) | $ 9,430 | (1,981) |

Deferred tax assets arise from expected future tax benefits attributable to temporary differences and carry-forwards. Deferred tax liabilities arise from expected future tax expense attributable to temporary differences. Temporary differences are defined as differences between the tax basis of an asset or liability and its reported amount in the financial statements that will result in taxable or deductible amounts in future years. Carry-forwards are defined as deductions or credits that cannot be currently utilized for tax purposes that may be carried forward to reduce taxable income or taxes payable in a future year.

As of December 31, 2018, as a result of the Tax Cuts and Jobs Act enacted in December 2017, stranded tax effects totaling $14.1 million are included in accumulated other comprehensive income. We have elected not to adopt ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220).* Therefore, the Company will recognize these stranded tax effects using the individual security approach. See Footnote 2 for further details.

**Deposits**

Core deposits, which exclude time deposits and brokered deposits, increased $2.53 billion to $34.17 billion as of December 31, 2018 from $31.64 billion as of December 31, 2017. The increase is due to the addition of new private client banking teams, as well as additional deposits garnered by our existing private client banking teams.

See Item 1. Business – Part I Deposit Products for the composition of our deposit accounts as of December 31, 2018 and 2017.

The following table presents our average deposits and average interest rates accrued for the periods indicated:

| | *Years ended December 31,* | | | |
|---|---|---|---|---|
| | *2018* | | *2017* | |
| *(dollars in thousands)* | **Average Balance** | **Average Rate** | **Average Balance** | **Average Rate** |
| NOW and interest-bearing demand | $ 3,661,849 | 1.43% | 3,864,932 | 0.77% |
| Money market | 17,878,509 | 1.16% | 17,086,353 | 0.73% |
| Time deposits | 1,648,433 | 1.77% | 1,504,887 | 1.12% |
| Non-interest-bearing demand deposits | 11,954,403 | - | 10,702,062 | - |
| Total deposits | $ 35,143,194 | 0.82% | 33,158,234 | 0.52% |

The following table presents time deposits of $100,000 or more by their maturity:

| *(in thousands)* | **December 31, 2018** |
|---|---|
| Three months or less | $ 826,812 |
| Over three months through six months | 384,727 |
| Over six months through one year | 568,575 |
| Over one year | 129,676 |
| Total (1) | $ 1,909,790 |

(1) Includes brokered time deposits of $597.0 million.

**Borrowings**

The following table presents information regarding our borrowings:

| | At or for the year ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2018 | | 2017 | | 2016 | |
| (dollars in thousands) | Amount | Weighted Average Rate | Amount | Weighted Average Rate | Amount | Weighted Average Rate |
| Federal Home Loan Bank advances | $ 4,970,000 | 2.51% | 4,195,000 | 1.65% | 1,975,900 | 1.17% |
| Federal Home Loan Bank repurchase agreements | - | 0.00% | - | 0.00% | 75,000 | 1.98% |
| Repurchase agreements | 150,000 | 2.93% | 75,000 | 2.34% | 350,000 | 2.76% |
| Federal funds purchased | 670,000 | 2.59% | 715,000 | 1.58% | 543,000 | 0.79% |
| Subordinated debt (1) | 260,000 | 5.30% | 260,000 | 5.30% | 260,000 | 5.30% |
| Total borrowings | $ 6,050,000 | 2.65% | 5,245,000 | 1.83% | 3,203,900 | 1.63% |
| Maximum total outstanding at any month-end | $ 6,187,000 | | 5,245,000 | | 3,722,000 | |
| Average balance | $ 5,331,600 | | 3,400,171 | | 2,961,425 | |
| Average rate | | 2.26% | | 1.79% | | 1.57% |

(1) Excludes $1.8 million and $2.6 million of deferred issuance costs reported as a direct reduction to the subordinated debt carrying amount in the Consolidated Statements of Financial Condition as of December 31, 2018 and 2017, respectively .

At December 31, 2018, our borrowings were $6.05 billion, or 14.3% of our funding liabilities, compared to $5.25 billion, or 13.6% of our funding liabilities, at December 31, 2017. The increase in our borrowings, primarily reflects the use of $775.0 million in additional FHLB borrowings to assist in the funding of our strong loan growth in 2018. These borrowings, excluding our issued subordinated debt, are collateralized by mortgage-backed and collateralized mortgage obligation securities, along with commercial real estate loans. We also hold $264.9 million in Federal Home Loan Bank of New York ("FHLB") capital stock as required collateral for our outstanding borrowing position with the FHLB. Based on our financial condition, our asset size, the available capacity under our repurchase agreement lines and our FHLB line, and the amount of securities and loans available for pledging, we estimate our available consolidated capacity for additional borrowings to be approximately $7.88 billion at December 31, 2018.

Additionally, in 2016, the Bank issued $260.0 million aggregate principal amount of Variable Rate Subordinated Notes due April 19, 2026 (the "Notes") to institutional investors. The Notes accrue interest at a fixed rate of 5.30% for the first five years until April 2021. After this date and for the remaining five years of the Notes' term, interest will accrue at a variable rate of LIBOR plus 3.92%. Additionally, during the variable interest rate period and at the Bank's option, the Notes can be prepaid by the Bank. Net proceeds from this offering were used for general corporate purposes and to facilitate our continued growth. Subordinated debt is reported in the Consolidated Statements of Financial Condition net of deferred issuance costs of $1.8 million.

The following table presents the maturity or re-pricing of our borrowings at December 31, 2018:

*Maturity or repricing period* *(in thousands)*

| 3 months or less | 3 - 12 months | 1 - 3 years | Over 3 years (1) | Total |
|---|---|---|---|---|
| $ 2,505,000 | 1,890,000 | 1,345,000 | 310,000 | 6,050,000 |

(1) Excludes $1.8 million of deferred issuance costs reported as a direct reduction to the subordinated debt carrying amount in the Consolidated Statements of Financial Condition.

### Contractual Obligations

The following table presents our significant contractual obligations as of December 31, 2018:

| | Payments due by period | | | | |
|---|---|---|---|---|---|
| *(in thousands)* | Less than 1 year | 1 - 3 years | 3 - 5 years | More than 5 years | Total |
| Borrowings (1) | $ 4,395,000 | 1,345,000 | 50,000 | 260,000 | 6,050,000 |
| Operating leases | 25,750 | 60,368 | 60,647 | 179,625 | 326,390 |
| Investments in qualified affordable housing projects | - | 181,273 | 20,863 | 16,939 | 219,075 |
| Information technology contracts | 19,242 | 21,078 | 1,518 | - | 41,838 |
| Total contractual cash obligations | $ 4,439,992 | 1,607,719 | 133,028 | 456,564 | 6,637,303 |

(1) Excludes $1.8 million of deferred issuance costs reported as a direct reduction to the subordinated debt carrying amount in the Consolidated Statements of Financial Condition.

On April 19, 2016, the Bank issued $260.0 million aggregate principal amount of Variable Rate Subordinated Notes due April 19, 2026 to institutional investors. The Notes accrue interest at a fixed rate of 5.30% for the first five years until April 2021. After this date and for the remaining five years of the Notes' term, interest will accrue at a variable rate of LIBOR plus 3.92%. Additionally, during the variable interest rate period and at the Bank's option, the Notes can be prepaid by the Bank. Net proceeds from this offering were used for general corporate purposes and to facilitate our continued growth.

### Off-Balance Sheet Arrangements

In the normal course of business, we have various outstanding commitments and contingent liabilities not reflected in the accompanying Consolidated Financial Statements.

We enter into transactions that involve financial instruments with off-balance sheet risks in the ordinary course of business to meet the financing needs of our clients. Such financial instruments include commitments to extend credit, standby letters of credit, and unused balances under confirmed letters of credit, all of which are primarily variable rate. Such instruments involve, to varying degrees, elements of credit and interest rate risk.

Our exposure to credit loss in the event of nonperformance by the other party with regard to financial instruments is represented by the contractual notional amount of those instruments. Financial instrument transactions are subject to our normal credit policies and approvals, financial controls and risk limiting and monitoring procedures. We generally require collateral or other security to support financial instruments with credit risk.

The following table presents a summary of our commitments and contingent liabilities:

| (in thousands) | December 31, 2018 | 2017 |
|---|---|---|
| Unused commitments to extend credit | $3,173,675 | 1,352,032 |
| Financial standby letters of credit | 482,482 | 497,581 |
| Commercial and similar letters of credit | 20,145 | 18,002 |
| Other | 1,254 | 1,559 |
| Total | $3,677,556 | 1,869,174 |

For further discussion of our commitments and contingent liabilities, see Note 19 to our Consolidated Financial Statements.

**Capital Resources**

As a New York state-chartered bank, we are required to maintain minimum levels of regulatory capital. These standards generally are as stringent as the comparable capital requirements imposed on national banks. The FDIC is also authorized to impose capital requirements in excess of these standards on individual banks on a case-by-case basis.

*Basel III Requirements*

On July 9, 2013, the FDIC approved final rules that substantially amended the regulatory risk-based capital rules applicable to Signature Bank, effective beginning January 1, 2015. The FDIC's final capital rules included new risk-based capital and leverage ratios, which where phased-in to effect over a multi-year period, and refine the definition of what constitutes "capital" for purposes of calculating those ratios. Full implementation of the capital rules for all institutions began on January 1, 2019. The minimum capital-level requirements applicable to Signature Bank under the final rules represented the following changes to the bank's capital adequacy requirements: (i) a new common equity Tier 1 risk-based capital ratio; (ii) an increase in the Tier 1 risk-based capital ratio minimum requirement from 4.0% to 6.0%; and (iii) a Tier 1 leverage ratio minimum requirement of 4.0% for all institutions, where prior to January 1, 2015, banks that received the highest rating of five categories used by regulators to rate banks and were not anticipating or experiencing any significant growth were required to maintain a leverage capital ratio of at least 3.0%.

The final rules also established a "capital conservation buffer" above the new regulatory minimum capital requirements, which must consist entirely of common equity Tier 1 capital. The phase-in of the capital conservation buffer began on January 1, 2016, at a level of 0.625% of risk-weighted assets for 2016 and increased to 1.250% for 2017. The minimum buffer was 1.875% for 2018 and is currently 2.500%. As the capital rules are now fully implemented, the following effective minimum capital ratios currently apply: (i) a common equity Tier 1 capital ratio (plus capital conservation buffer) of 7.0%, (ii) a Tier 1 capital ratio (plus capital conservation buffer) of 8.5%, and (iii) a total capital ratio (plus capital conservation buffer) of 10.5%. Under the final rules, institutions are subject to limitations on paying dividends, engaging in share repurchases, and paying discretionary bonuses if their capital levels fall below the buffer amount. These limitations establish a maximum percentage of eligible retained income that could be utilized for such actions.

Basel III provided discretion for regulators to impose an additional buffer, the "countercyclical buffer," of up to 2.5% of common equity Tier 1 capital to take into account the macro-financial environment and periods of excessive credit growth. However, the final rules permit the countercyclical buffer to be applied only to "advanced approach banks" (i.e., banks with $250 billion or more in total assets or $10 billion or more in total foreign exposures), which currently excludes Signature Bank. The final rules also implement revisions and clarifications consistent with Basel III regarding the various components of Tier 1 capital, including common equity, unrealized gains and losses, as well as certain instruments that will no longer qualify as Tier 1 capital, some of which will be phased out over time.

The final rules set forth certain changes for the calculation of risk-weighted assets, which we have been required to utilize since January 1, 2015. The standardized approach final rule utilizes an increased number of credit risk exposure categories and risk weights, and also addresses: (i) an alternative standard of creditworthiness consistent with Section 939A of the Dodd-Frank Act; (ii) revisions to recognition of credit risk mitigation; (iii) rules for risk weighting of equity exposures and past due loans; (iv) revised capital treatment for derivatives and repo-style transactions; and (v) disclosure requirements for top-tier banking organizations with $50 billion or more in total assets that are not subject to the "advance approach rules" that apply to banks with greater than $250 billion in consolidated assets. Based on our current capital composition and levels, we believe that we are in compliance with the requirements as set forth in the final rules as they are presently in effect.

In 2017, the federal banking agencies adopted a final rule to extend the regulatory capital treatment applicable during 2017 under the capital rules for certain items, including regulatory capital deductions, risk weights, and certain minority interest limitations. The relief provided under the final rule applies to banking organizations that are not subject to the capital rules' advanced approaches, such as our Bank. Specifically, the final rule extends the current regulatory capital treatment of mortgage servicing assets ("MSAs"), deferred tax assets ("DTAs") arising from temporary differences that could not be realized through net operating loss carrybacks, significant investments in the capital of unconsolidated financial institutions in the form of common stock, non-significant investments in the capital of unconsolidated financial institutions, significant investments in the capital of unconsolidated financial institutions that are not in the form of common stock, and common equity Tier 1 minority interest, Tier 1 minority interest, and total capital minority interest exceeding the capital rules' minority interest limitations.

We are also subject to FDIC regulations that apply to every FDIC-insured commercial bank and thrift institution, a system of mandatory and discretionary supervisory actions that generally become more severe as the capital levels of an individual institution decline. The regulations establish five capital categories for purposes of determining our treatment under these prompt corrective action ("PCA") provisions: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," or "critically undercapitalized."

As of January 1, 2015, the definitions of these capital categories changed in accordance with the federal banking agencies' final rule to implement Basel III and new minimum leverage and risk-based capital requirements. Under the revised PCA capital category definitions, we will be categorized as "well capitalized" if we (i) have a total risk-based capital ratio of 10.0% or greater; (ii) have a Tier 1 risk-based capital ratio of 8.0% or greater; (iii) have a common equity Tier 1 risk-based capital ratio of 6.5% or greater; (iv) have a leverage ratio of 5.0% or greater; and (v) are not subject to any written agreement, order, capital directive, or PCA directive issued by the FDIC to meet and maintain a specific capital level.

We will be categorized as "adequately capitalized" if we have (i) a total risk-based capital ratio of 8.0% or greater; (ii) a Tier 1 risk-based capital ratio of 6.0% or greater; (iii) a common equity Tier 1 capital ratio of 4.5% or greater; and (iv) a leverage ratio of 4.0% or greater (3.0% if we are rated in the highest supervisory category).

We will be categorized as "undercapitalized" if we have (i) a total risk-based capital ratio that is less than 8.0%; (ii) a Tier 1 risk-based capital ratio that is less than 6.0%; (iii) a common equity Tier 1 capital ratio that is less than 4.5%; or (iv) a leverage ratio that is less than 4.0%.

We will be categorized as "significantly undercapitalized" if we have (i) a total risk-based capital ratio that is less than 6.0%; (ii) a Tier 1 risk-based capital ratio that is less than 4.0%; (iii) a common equity Tier 1 capital ratio that is less than 3.0%; or (iv) a leverage ratio that is less than 3.0%.

We will be categorized as "critically undercapitalized" and subject to provisions mandating appointment of a conservator or receiver if we have a ratio of "tangible equity" to total assets that is 2.0% or less. "Tangible equity" generally includes core capital plus cumulative perpetual preferred stock.

The capital amounts and ratios presented in the following table demonstrate that we were "well capitalized" as of December 31, 2018:

| (dollars in thousands) | Actual | | Required for Capital Adequacy Purposes | | Required to be Well Capitalized | |
|---|---|---|---|---|---|---|
| | Amount | Ratio | Amount | Ratio | Amount | Ratio |
| Total capital (to risk-weighted assets) | $ 5,040,828 | 13.41% | 3,006,522 | 8.00% | 3,758,153 | 10.00% |
| Tier 1 capital (to risk-weighted assets) | 4,551,609 | 12.11% | 2,254,892 | 6.00% | 3,006,522 | 8.00% |
| Common equity Tier 1 capital (to risk-weighted assets) | 4,551,609 | 12.11% | 1,691,169 | 4.50% | 2,442,800 | 6.50% |
| Tier 1 leverage capital (to average assets) | 4,551,609 | 9.70% | 1,876,893 | 4.00% | 2,346,116 | 5.00% |

The capital amounts and ratios presented in the following table demonstrate that we were "well capitalized" as of December 31, 2017:

| (dollars in thousands) | Actual | | Required for Capital Adequacy Purposes | | Required to be Well Capitalized | |
|---|---|---|---|---|---|---|
| | Amount | Ratio | Amount | Ratio | Amount | Ratio |
| Total capital (to risk-weighted assets) | $ 4,553,605 | 13.32% | 2,735,682 | 8.00% | 3,419,603 | 10.00% |
| Tier 1 capital (to risk-weighted assets) | 4,099,327 | 11.99% | 2,051,762 | 6.00% | 2,735,682 | 8.00% |
| Common equity Tier 1 capital (to risk-weighted assets) | 4,099,327 | 11.99% | 1,538,821 | 4.50% | 2,222,742 | 6.50% |
| Tier 1 leverage capital (to average assets) | 4,099,327 | 9.72% | 1,687,292 | 4.00% | 2,109,115 | 5.00% |

During 2018, we paid cash dividends in the third and fourth quarters of 2018 to eligible common stockholders and declared cash dividends for the fourth quarter of 2018 on January 17, 2019. We also initiated a stock repurchase program in 2018. See "Regulation and Supervision—Restrictions on Dividends and Other Distributions."

*Stress Testing*

Prior to the second quarter of 2018, the Dodd-Frank Act required banks with total consolidated assets of more than $10 billion to conduct annual stress tests. However, the Economic Growth, Regulatory Relief, and Consumer Protection Act caused changes in the Dodd-Frank Wall Street Reform and Consumer Protection Act. Specifically, the Economic Growth Act raised the asset threshold for required Dodd-Frank Act Stress Tests (DFAST) from $10 billion to $100 billion and made the requirement "periodic" rather than "annual." The Bank will continue to perform capital stress testing on a situational and idiosyncratic basis, such as during our annual capital planning and budgeting processes.

The Dodd-Frank Act also requires the FDIC, in coordination with federal financial regulatory agencies, to issue regulations establishing methodologies for stress testing that provide for at least three different sets of conditions, including baseline, adverse, and severely adverse. The regulations also require banks to publish a summary of the results of the stress tests. In October 2012, the FDIC issued a final rule regarding annual stress tests requiring a bank subject to the rule to assess the quarterly impact of stress scenarios on the bank's capital over a horizon of nine quarters. The Bank has developed a process to comply with the stress testing requirements, which involves Senior Management, Risk Management, and Finance, along with third-party consultants who assist in this process. The Risk Committee of the Board of Directors receives quarterly updates as to the progress and challenges in complying with this new regulatory requirement.

In compliance with historical regulation, on July 28, 2017, we submitted our stress testing results on data as of December 31, 2016. We publicly disclosed our results for the severely adverse scenario on October 20, 2017. The stress testing results affirmed the adequacy of the Bank's capital, even under severe economic conditions. Due to regulation changes in the second quarter of 2018 and the increase in the asset threshold, Signature Bank will no longer be required to file and report annual company-run stress tests until the revised threshold is reached.

**Liquidity**

Liquidity is the measurement of our ability to meet our cash needs. Our objective in managing liquidity is to maintain our ability to meet loan commitments and deposit withdrawals, purchase investments and pay other liabilities in accordance with their terms, without an adverse impact on our current or future earnings. Our liquidity management is guided by policies developed and monitored by our asset/liability management committee and

approved by our Board of Directors. The asset/liability management committee consists of, among others, our Chairman, President and Chief Executive Officer, Vice Chairman, Chief Operating Officer, Chief Financial Officer and Treasurer. These policies take into account the marketability of assets, the source and stability of deposits, our wholesale borrowing capacity and the amount of our loan commitments. While the Bank may raise funds through a common stock offering or debt issuance to facilitate continued growth, our primary source of liquidity has been core deposit growth.

Additionally, we have borrowing sources available to supplement deposit flows, including the FHLB and repurchase agreement lines with other financial institutions. We also have access to the brokered deposit market, through which we have numerous alternatives and significant capacity, if needed. We also opportunistically access capital markets from time to time to obtain additional capital to support our growth as evidenced by our historical common stock offerings, as well as the 2016 subordinated debt issuance.

Credit availability at the FHLB is based on our financial condition, our asset size and the amount of collateral we hold at the FHLB. At December 31, 2018, our FHLB borrowings totaled $4.97 billion with an average rate of 2.51% that mature by December 2023. We had no securities sold under repurchase agreements to the FHLB as of December 31, 2018. While not pledged, FHLB held $658.6 million of securities as of December 31, 2018 as custodian as of quarter end. These securities can be pledged towards future borrowings, as necessary.

We also have repurchase agreement lines with several leading financial institutions totaling $2.23 billion. At December 31, 2018, we had $150.0 million of securities sold under repurchase agreements to one of these institutions. These borrowings have an average rate of 2.93% and mature by May 2020.

Based on our financial condition, our asset size, the available capacity under our repurchase agreement lines and our FHLB line, and the amount of securities and loans available for pledging, we estimate our available consolidated capacity for additional borrowings to be approximately $7.88 billion as of December 31, 2018.

The federal banking agencies in September 2014 issued a final rule that implements a new “liquidity coverage ratio” (“LCR Rule”) based upon Basel III requirements that for the first time regulate bank liquidity in detail. The LCR Rule does not apply to depository institutions, including Signature Bank, with less than $50 billion in consolidated assets. Based on our anticipated rate of growth, we do not expect that the LCR rule will impact our operations or financial condition within the next year. However, Congress recently passed the Economic Growth, Regulatory Relief and Consumer Protection Act which increased the asset threshold for designation as a Systemically Important Financial Institution (“SIFI”) from $50 billion to $250 billion in total consolidated assets. Such a change may impact the asset thresholds applicable to the LCR and similar rules, as well as the FDIC’s supervisory expectations with respect to the substance of such rules.

On July 18, 2018, the Bank declared its inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018 to our common shareholders of record at the close of business on August 1, 2018. The Bank declared its second cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on November 15, 2018 to common shareholders of record at the close of business on November 1, 2018. On January 17, 2019, the Bank declared its third cash dividend of $0.56 per share, or a total of $30.8 million, which was paid on February 15, 2019 to common shareholders of record at the close of business on February 1, 2019.

In addition, in October 2018, the Bank’s stockholders approved our common stock repurchase program which provides the Bank the ability to repurchase common stock from shareholders in the open market up to an amount of $500.0 million. Share buybacks are also subject to shareholder and regulatory approval, which were received for the repurchase program of up to $500 million in October and November 2018, respectively. Subsequent to receipt of the required approvals, in the fourth quarter of 2018, the Bank repurchased 358,492 shares of common stock for a total of $41.8 million. As of December 31, 2018, the remaining program balance was $458.2 million.

Any future determination to pay dividends or buy back shares will be at the discretion of our Board of Directors and will be dependent upon then-existing conditions, including our financial condition and results of operations, capital requirements, commercial real estate concentration, contractual restrictions, business prospects and other factors that the Board of Directors considers relevant.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is defined as the sensitivity of income, fair values and capital to changes in interest rates, foreign currency exchange rates, commodity prices and other relevant market prices and rates. The primary risk to which we are exposed is interest rate movement inherent in our lending, investment management, deposit taking and borrowing activities. Substantially all of our interest rate risk arises from these activities, which are entered into for purposes other than trading.

The principal objective of asset/liability management is to manage the sensitivity of net income to changes in interest rates. Asset/liability management is governed by policies approved by our Board of Directors. Day-to-day oversight of this function is performed by our asset/liability management committee. Senior management and our Board of Directors, on an ongoing basis, review our overall interest rate risk position and strategies.

### Interest Rate Risk Management

Our asset/liability management committee seeks to manage our interest rate risk by structuring our balance sheet to maximize net interest income while maintaining an acceptable level of risk exposure to changes in market interest rates. The achievement of this goal requires a balance among liquidity, interest rate risk and profitability considerations. The committee meets regularly to review the sensitivity of assets and liabilities to interest rate changes, deposit rates and trends, the book and market values of assets and liabilities, unrealized gains and losses, purchase and sales activities and the maturities of investments and borrowings.

We use various asset/liability strategies including derivative instruments such as interest rate swaps, to manage and control the interest rate sensitivity of our assets and liabilities. These strategies include pricing of loans and deposit products, adjusting the terms of loans and borrowings and managing the deployment of our securities and short-term assets to manage mismatches in interest rate re-pricing.

To effectively measure and manage interest rate risk, we use simulation analysis to determine the impact on net interest income under various hypothetical interest rate scenarios. Based on these simulations, we quantify interest rate risk and develop and implement appropriate strategies. At December 31, 2018, we used a simulation model to analyze net interest income sensitivity to both (i) a parallel shift in interest rates, in which the base market interest rate forecast was increased in quarterly increments over the first twelve months by 100, 200, 300 and 400 basis points and decreased by 100 basis points, followed by rates holding constant thereafter (“ramp scenario”) and (ii) a parallel and sustained shift in interest rates, in which the base market interest rate forecast was immediately increased by 100, 200, 300 and 400 basis points and decreased by 100 basis points (“shock scenario”).

The following table indicates the sensitivity of projected annualized net interest income to the interest rate movements described above at December 31, 2018:

| *(dollars in thousands)* | | **Adjusted Net Interest Income** | **Change from Base** |
|---|---|---|---|
| **Ramp scenario:** | | | |
| Base | $ | 1,270,160 | - |
| Down 100 basis points | | 1,261,942 | (0.7)% |
| Up 100 basis points | | 1,259,946 | (0.8)% |
| Up 200 basis points | | 1,241,867 | (2.2)% |
| Up 300 basis points | | 1,213,938 | (4.4)% |
| Up 400 basis points | | 1,181,821 | (7.0)% |
| **Shock scenario:** | | | |
| Base | $ | 1,270,160 | - |
| Down 100 basis points | | 1,271,526 | 0.1% |
| Up 100 basis points | | 1,232,496 | (3.0)% |
| Up 200 basis points | | 1,187,522 | (6.5)% |
| Up 300 basis points | | 1,124,197 | (11.5)% |
| Up 400 basis points | | 1,053,970 | (17.0)% |

We also use a simulation model to measure the impact that hypothetical market interest rate changes will have on the net present value of assets and liabilities, which is defined as market value of equity. At December 31, 2018, we used a simulation model to analyze the market value of equity sensitivity to a parallel and sustained shift in interest rates, in which the base market interest rate forecast was immediately increased by 100, 200, 300 and 400 basis points and decreased by 100 basis points.

The following table indicates the sensitivity of market value of equity at December 31, 2018 to the interest rate movements described above (base case market value of equity is $6.89 billion):

| *(dollars in thousands)* | | **Sensitivity** | **Change from Base** |
|---|---|---|---|
| Down 100 basis points | $ | (87,860) | (1.3)% |
| Up 100 basis points | | (118,232) | (1.7)% |
| Up 200 basis points | | (261,583) | (3.8)% |
| Up 300 basis points | | (558,861) | (8.1)% |
| Up 400 basis points | | (889,773) | (12.9)% |

The market value of equity sensitivity analysis assumes an immediate parallel shift in interest rates and yield curves. The computation of prospective effects of hypothetical interest rate changes is based on numerous assumptions, including relative levels of interest rates, asset prepayments, deposit decay and changes in re-pricing levels of deposits to general market rates, and should not be relied upon as indicative of actual results. Further, the computations do not take into account any actions that we may undertake in response to future changes in interest rates.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

For our Consolidated Financial Statements, see index on page F-1.

## ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

## ITEM 9A. CONTROLS AND PROCEDURES

The Company's management, with the participation of the Company's principal executive officer and principal financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the ''Exchange Act'')) as of the end of the period covered by this report. Based on such evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act, including this report, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding the required disclosure.

### Management's Report on Internal Control over Financial Reporting

The management of Signature Bank (the "Company") is responsible for establishing and maintaining effective internal control over financial reporting. Our system of internal control is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's consolidated financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

Internal control over financial reporting includes procedures that pertain to the maintenance of records that, in reasonable detail, accurately reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are made only in accordance with the authorization of management and the Board of Directors; and 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 our consolidated financial statements.

All internal control systems, no matter how well designed, have inherent limitations, including the possibility of human error and the circumvention of controls. Furthermore, because of changes in conditions, the effectiveness of internal control may vary over time. Accordingly, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Since these limitations are known features of the financial reporting process, however, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

As of December 31, 2018, management evaluated the effectiveness of internal control over financial reporting based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management believes that the Company's internal control over financial reporting as of December 31, 2018 is effective using these criteria.

The Company's internal control over financial reporting as of December 31, 2018 has been audited by KPMG LLP, the independent registered public accounting firm that has also audited the Company's consolidated financial statements as of and for the year ended December 31, 2018. The report of KPMG LLP on the effectiveness of the Company's internal control over financial reporting is included below.

KPMG LLP
345 Park Avenue
New York, NY 10154-0102

## Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Signature Bank:

*Opinion on Internal Control Over Financial Reporting*

We have audited Signature Bank and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2018, 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 Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated statements of financial condition of the Company as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), and our report dated March 1, 2019 expressed an unqualified opinion on those consolidated financial statements.

*Basis for Opinion*

The Company's management is responsible 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 Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

*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



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KPMG International Cooperative ("KPMG International"), a Swiss entity.

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.

KPMG LLP

New York, New York
March 1, 2019

## ITEM 9B. OTHER INFORMATION

None.

## PART III

## ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Incorporated by reference to Signature Bank's Proxy Statement for the Annual Meeting of Stockholders to be held April 18, 2019.

## ITEM 11. EXECUTIVE COMPENSATION

Incorporated by reference to Signature Bank's Proxy Statement for the Annual Meeting of Stockholders to be held April 18, 2019.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Incorporated by reference to Signature Bank's Proxy Statement for the Annual Meeting of Stockholders to be held April 18, 2019.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Incorporated by reference to Signature Bank's Proxy Statement for the Annual Meeting of Stockholders to be held April 18, 2019.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Incorporated by reference to Signature Bank's Proxy Statement for the Annual Meeting of Stockholders to be held April 18, 2019.

## PART IV

## ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

A. Financial Statements and Financial Statement Schedules

(1) The Consolidated Financial Statements of the Registrant are listed and filed as part of this report on pages F-1 to F-63. The Index to the Consolidated Financial Statements appears on page F-1.

(2) Financial Statement Schedules: All schedule information is included in the notes to the Audited Consolidated Financial Statements or is omitted because it is either not required or not applicable.

B. Exhibit Listing

| Exhibit No. | Exhibit |
|---|---|
| 3.1 | Restated Organization Certificate (Incorporated by reference to Signature Bank's Quarterly Report on Form 10-Q for the period ended June 30, 2005.) |
| 3.2 | Certificate of Amendment to the Bank's Restated Organization Certificate with respect to Signature Bank's Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series A, par value $0.01 per share (Incorporated by reference to Signature Bank's Current Report on Form 8-K filed on December 17, 2008.) |
| 3.3 | Certificate of Amendment to the Bank's Restated Organization Certificate. (Incorporated by reference from Annex A to the 2017 Definitive Proxy Statement on Schedule 14A, filed with the Federal Deposit Insurance Corporation on March 10, 2017.) |
| 3.4 | Amended and Restated By-laws of the Registrant. (Incorporated by reference to Signature Bank's Current Report on Form 8-K filed on January 23, 2018.) |
| 4.1 | Specimen Common Stock Certificate (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 10.1 | Signature Bank Amended and Restated 2004 Long-Term Incentive Plan (Incorporated by reference from Appendix B to the 2018 Definitive Proxy Statement on Schedule 14A, filed with the Federal Deposit Insurance Corporation on April 25, 2018.) |
| 10.2 | Amended and Restated Signature Bank Change of Control Plan (Incorporated by reference to Signature Bank's Current Report on Form 8-K, filed with the Federal Deposit Insurance Corporation on September 19, 2007.) |
| 10.4 | Networking Agreement, effective as of April 18, 2001, between Signature Securities and Signature Bank (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 10.13 | Employment Agreement, dated March 22, 2004, between Signature Bank and Joseph J. DePaolo (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 14.1 | Code of Ethics (Incorporated by reference from Signature Bank's 2004 Form 10-K, filed with the Federal Deposit Insurance Corporation on March 16, 2005.) |
| 21.1 | Subsidiaries of Signature Bank |
| 31.1 | Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2 | Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1 | Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |

## ITEM 16. Form 10-K Summary

Not applicable.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**SIGNATURE BANK**

By: /s/ JOSEPH J. DEPAOLO
Joseph J. DePaolo
President, Chief Executive Officer and Director

Date: March 1, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on March 1, 2019 by the following persons on behalf of the registrant in the capacities indicated.

| Signature | Title |
|---|---|
| /s/ SCOTT A. SHAY<br>(Scott A. Shay) | Chairman of the Board of Directors |
| /s/ JOHN TAMBERLANE<br>(John Tamberlane) | Vice Chairman, Director |
| /s/ VITO SUSCA<br>(Vito Susca) | Executive Vice President and Chief Financial Officer<br>(Principal Accounting and Financial Officer) |
| /s/ KATHRYN A. BYRNE<br>(Kathryn A. Byrne) | Director |
| /s/ Derrick D. Cephas<br>(Derrick D. Cephas) | Director |
| /s/ ALFONSE M. D'AMATO<br>(Alfonse M. D'Amato) | Director |
| /s/ BARNEY FRANK<br>(Barney Frank) | Director |
| /s/ JUDITH A. HUNTINGTON<br>(Judith A. Huntington) | Director |
| /s/ JEFFREY W. MESHEL<br>(Jeffrey W. Meshel) | Director |

## INDEX TO CONSOLIDATED FINANCIAL STATEMENTS


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Consolidated Statements of Financial Condition as of December 31, 2018 and 2017 . . . . F-3

Consolidated Statements of Income for the years ended December 31, 2018, 2017, and 2016 . . . . F-4

Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017, and 2016 . . . . F-5

Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2018, 2017, and 2016 . . . . F-6

Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017, and 2016 . . . . F-7

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KPMG LLP
345 Park Avenue
New York, NY 10154-0102

## Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Signature Bank:

*Opinion on the Consolidated Financial Statements*

We have audited the accompanying consolidated statements of financial condition of Signature Bank and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 1, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

*Basis for Opinion*

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company 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 audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits 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. We believe that our audits provide a reasonable basis for our opinion.

KPMG LLP

We have served as the Company's auditor since 2001.

New York, New York
March 1, 2019



KPMG LLP is a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

**SIGNATURE BANK**
**CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION**

| *(dollars in thousands, except shares and per share amounts)* | *December 31,* 2018 | 2017 |
|---|---|---|
| **ASSETS** | | |
| Cash and due from banks | $ 269,204 | 290,078 |
| Short-term investments | 48,051 | 45,388 |
| Total cash and cash equivalents | 317,255 | 335,466 |
| Securities available-for-sale | 7,301,604 | 6,953,719 |
| Securities held-to-maturity (fair value $1,845,198 at December 31, 2018 and $1,983,087 at December 31, 2017) | 1,883,533 | 1,996,376 |
| Federal Home Loan Bank stock | 264,877 | 227,920 |
| Loans held for sale | 485,305 | 432,277 |
| Loans and leases, net | 36,193,122 | 32,416,580 |
| Premises and equipment, net | 59,051 | 61,571 |
| Accrued interest and dividends receivable | 141,829 | 117,070 |
| Other assets | 718,240 | 576,741 |
| Total assets | $ 47,364,816 | 43,117,720 |
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | |
| Deposits | | |
| Non-interest-bearing | $ 12,016,197 | 11,353,038 |
| Interest-bearing | 24,362,576 | 22,086,789 |
| Total deposits | 36,378,773 | 33,439,827 |
| Federal funds purchased and securities sold under agreements to repurchase | 820,000 | 790,000 |
| Federal Home Loan Bank borrowings | 4,970,000 | 4,195,000 |
| Subordinated debt | 258,174 | 257,381 |
| Accrued expenses and other liabilities | 530,729 | 403,821 |
| Total liabilities | 42,957,676 | 39,086,029 |
| Shareholders' equity | | |
| Preferred stock, par value $.01 per share; 61,000,000 shares authorized; none issued at December 31, 2018 and December 31, 2017 | - | - |
| Common stock, par value $.01 per share; 64,000,000 shares authorized; 55,405,531 shares issued and 55,039,433 outstanding at December 31, 2018; 54,979,213 shares issued and 54,977,971 outstanding at December 31, 2017 | 554 | 550 |
| Additional paid-in capital | 1,862,896 | 1,809,642 |
| Retained earnings | 2,730,899 | 2,290,537 |
| Treasury stock, 366,098 shares at December 31, 2018 and 1,242 shares at December 31, 2017 | (42,680) | (171) |
| Accumulated other comprehensive loss | (144,529) | (68,867) |
| Total shareholders' equity | 4,407,140 | 4,031,691 |
| Total liabilities and shareholders' equity | $ 47,364,816 | 43,117,720 |

See accompanying notes to Consolidated Financial Statements.

**SIGNATURE BANK**
**CONSOLIDATED STATEMENTS OF INCOME**

| *(dollars in thousands, except per share amounts)* | *Years ended December 31,* 2018 | 2017 | 2016 |
|---|---|---|---|
| **INTEREST AND DIVIDEND INCOME** | | | |
| Loans held for sale | $ 10,863 | 4,334 | 4,572 |
| Loans and leases, net | 1,389,435 | 1,191,194 | 1,042,717 |
| Securities available-for-sale | 224,012 | 201,657 | 198,001 |
| Securities held-to-maturity | 57,930 | 58,855 | 62,834 |
| Other investments | 26,680 | 14,129 | 9,027 |
| Total interest income | 1,708,920 | 1,470,169 | 1,317,151 |
| **INTEREST EXPENSE** | | | |
| Deposits | 289,248 | 171,829 | 123,285 |
| Federal funds purchased and securities sold under agreements to repurchase | 13,484 | 9,695 | 11,857 |
| Federal Home Loan Bank borrowings | 92,628 | 36,524 | 24,565 |
| Subordinated debt | 14,573 | 14,535 | 10,202 |
| Total interest expense | 409,933 | 232,583 | 169,909 |
| Net interest income before provision for loan and lease losses | 1,298,987 | 1,237,586 | 1,147,242 |
| Provision for loan and lease losses | 162,524 | 263,297 | 155,774 |
| Net interest income after provision for loan and lease losses | 1,136,463 | 974,289 | 991,468 |
| **NON-INTEREST INCOME** | | | |
| Commissions | 13,120 | 12,299 | 11,474 |
| Fees and service charges | 28,553 | 23,557 | 21,846 |
| Net gains on sales of securities | 989 | 3,963 | 7,711 |
| Net gains on sales of loans | 6,738 | 9,218 | 6,750 |
| Other-than-temporary impairment losses on securities: | | | |
| Total impairment losses on securities | (2) | (654) | (986) |
| Portion recognized in other comprehensive income (before taxes) | (14) | 21 | 559 |
| Net impairment losses on securities recognized in earnings | (16) | (633) | (427) |
| Tax credit investment amortization | (30,195) | (15,821) | (8,562) |
| Other income | 4,089 | 3,458 | 3,958 |
| Total non-interest income | 23,278 | 36,041 | 42,750 |
| **NON-INTEREST EXPENSE** | | | |
| Salaries and benefits | 302,095 | 273,240 | 246,406 |
| Occupancy and equipment | 34,311 | 32,141 | 29,140 |
| Information technology | 25,732 | 22,623 | 20,343 |
| FDIC assessment fees | 25,256 | 26,996 | 21,265 |
| Professional fees | 13,698 | 12,021 | 9,671 |
| Other general and administrative | 85,186 | 68,045 | 49,946 |
| Total non-interest expense | 486,278 | 435,066 | 376,771 |
| Income before income taxes | 673,463 | 575,264 | 657,447 |
| Income tax expense | 168,121 | 188,055 | 261,123 |
| Net income | $ 505,342 | 387,209 | 396,324 |
| **PER COMMON SHARE DATA** | | | |
| Earnings per share – basic | $ 9.27 | 7.17 | 7.42 |
| Earnings per share – diluted | $ 9.23 | 7.12 | 7.37 |
| Dividends per common share | $ 1.12 | - | - |

See accompanying notes to Consolidated Financial Statements.

**SIGNATURE BANK**
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

| | At or for the years ended December 31, | | |
|---|---|---|---|
| *(in thousands)* | **2018** | **2017** | **2016** |
| Net income | $ 505,342 | 387,209 | 396,324 |
| Other comprehensive income, net of tax: | | | |
| Net unrealized gains (losses) on securities | (100,974) | (22,015) | (72,418) |
| Tax effect | 25,533 | 8,163 | 30,032 |
| Net of tax | (75,441) | (13,852) | (42,386) |
| Reclassification adjustment for net gains on sales of securities included in net income | (989) | (3,963) | (7,711) |
| Tax effect | 292 | 1,470 | 3,198 |
| Net of tax | (697) | (2,493) | (4,513) |
| Amortization of net unrealized loss on securities transferred to held-to-maturity | 2,266 | 2,872 | 3,015 |
| Tax effect | (670) | (1,065) | (1,250) |
| Net of tax | 1,596 | 1,807 | 1,765 |
| Other-than-temporary gains (losses) on securities related to noncredit factors | 14 | (21) | (559) |
| Tax effect | (4) | 8 | 232 |
| Net of tax | 10 | (13) | (327) |
| Reclassification adjustment for other-than-temporary impairment losses on securities related to credit factors included in net income | 16 | 633 | 427 |
| Tax effect | (5) | (235) | (177) |
| Net of tax | 11 | 398 | 250 |
| Net unrealized gains (losses) on cash flow hedges | (3,302) | - | - |
| Reclassification adjustment for net losses included in net income | 4 | - | - |
| Tax effect | 974 | - | - |
| Net of tax | (2,324) | - | - |
| Total other comprehensive loss, net of tax | (76,845) | (14,153) | (45,211) |
| Comprehensive income, net of tax | $ 428,497 | 373,056 | 351,113 |

See accompanying notes to Consolidated Financial Statements.

**SIGNATURE BANK**
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**

| *(in thousands)* | | Common stock | Additional paid-in capital | Retained earnings | Treasury stock | Accumulated other comprehensive loss | Total shareholders' equity |
|---|---|---|---|---|---|---|---|
| Balance at December 31, 2015 | $ | 509 | 1,399,501 | 1,507,011 | (5,684) | (9,503) | 2,891,834 |
| Common stock issued | | 24 | 318,764 | - | - | - | 318,788 |
| Stock options activity, net | | - | - | - | - | - | - |
| Restricted stock activity, net | | 13 | 44,744 | - | 5,775 | - | 50,532 |
| Stock warrant activity, net | | - | 91 | - | (91) | - | - |
| Other | | - | - | (3) | - | - | (3) |
| Net income | | - | - | 396,324 | - | - | 396,324 |
| Other comprehensive loss, net of tax | | - | - | - | - | (45,211) | (45,211) |
| Balance at December 31, 2016 | $ | 546 | 1,763,100 | 1,903,332 | - | (54,714) | 3,612,264 |
| Common stock issued | | - | - | - | - | - | - |
| Stock options activity, net | | - | - | - | - | - | - |
| Restricted stock activity, net | | 4 | 46,371 | - | - | - | 46,375 |
| Stock warrant activity, net | | - | 171 | - | (171) | - | - |
| Other | | - | - | (4) | - | - | (4) |
| Net income | | - | - | 387,209 | - | - | 387,209 |
| Other comprehensive loss, net of tax | | - | - | - | - | (14,153) | (14,153) |
| Balance at December 31, 2017 | $ | 550 | 1,809,642 | 2,290,537 | (171) | (68,867) | 4,031,691 |
| Opening retained earnings adjustments (1) | | - | - | (2,972) | - | 1,183 | (1,789) |
| Common stock issued | | 3 | - | - | - | - | 3 |
| Stock options activity, net | | - | - | - | - | - | - |
| Restricted stock activity, net | | 1 | 51,989 | - | 171 | - | 52,161 |
| Stock warrant activity, net | | - | 1,265 | - | (869) | - | 396 |
| Common stock repurchased | | - | - | - | (41,811) | - | (41,811) |
| Other | | - | - | (3) | - | - | (3) |
| Net income | | - | - | 505,342 | - | - | 505,342 |
| Other comprehensive loss, net of tax | | - | - | - | - | (76,845) | (76,845) |
| Dividends paid on common stock ($0.56 per share) | | - | - | (62,005) | - | - | (62,005) |
| Balance at December 31, 2018 | $ | 554 | 1,862,896 | 2,730,899 | (42,680) | (144,529) | 4,407,140 |

(1) Effective January 1, 2018, we adopted changes in accounting for sale of repossessed assets pursuant to ASU 2014-09 (*Amendments to Revenue from Contracts with Customers*) and ASU 2016-01 (*Amendments to Financial Instruments- Recognition and Measurement of Financial Assets*). Accordingly, we recorded a $3.0 million decrease to retained earnings that included a reclassification of $1.2 million of unrealized losses related to equity securities from accumulated other comprehensive loss to retained earnings as a cumulative-effect adjustment.

See accompanying notes to Consolidated Financial Statements.

**SIGNATURE BANK**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

| *(in thousands)* | *Years ended December 31,* 2018 | 2017 | 2016 |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES** | | | |
| Net income | $ 505,342 | 387,209 | 396,324 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Depreciation and amortization | 14,007 | 12,193 | 10,086 |
| Provision for loan and lease losses | 162,524 | 263,297 | 155,774 |
| Net impairment losses on securities recognized in earnings | 16 | 633 | 427 |
| Net amortization/accretion of premium/discount | 117,952 | 115,442 | 106,257 |
| Stock-based compensation expense | 52,566 | 46,375 | 41,656 |
| Net gains on sales of securities and loans | (7,727) | (13,181) | (14,461) |
| Deferred income tax expense | 1,379 | 58,127 | 8,712 |
| Federal tax reform impact on OCI remeasurement | - | 14,100 | - |
| Purchases of loans held for sale | (1,892,916) | (2,112,418) | (1,894,896) |
| Proceeds from sales and principal repayments of loans held for sale | 1,690,598 | 1,910,133 | 1,660,081 |
| Net increase in accrued interest and dividends receivable | (24,759) | (14,107) | (8,957) |
| Net increase in other assets | (115,088) | (179,842) | (48,939) |
| Net increase in accrued expenses and other liabilities | 147,669 | 58,051 | 152,940 |
| Net cash provided by operating activities | 651,563 | 546,012 | 565,004 |
| **CASH FLOWS FROM INVESTING ACTIVITIES** | | | |
| Purchases of securities available-for-sale ("AFS") | (1,458,768) | (1,634,890) | (1,632,908) |
| Proceeds from sales of securities AFS | 30,269 | 103,532 | 204,668 |
| Maturities, redemptions, calls and principal repayments on securities AFS | 1,030,451 | 1,136,146 | 1,308,463 |
| Purchases of securities held-to-maturity ("HTM") | (113,067) | (201,605) | (171,129) |
| Maturities, redemptions, calls and principal repayments on securities HTM | 213,202 | 228,238 | 252,383 |
| Purchases of Federal Home Loan Bank stock | (1,404,732) | (621,560) | (322,441) |
| Proceeds from redemptions of Federal Home Loan Bank stock | 1,367,775 | 526,269 | 344,217 |
| Proceeds from the settlement of bank owned life insurance ("BOLI") | - | 620 | 1,187 |
| Net increase in loans and leases | (3,942,777) | (3,855,016) | (5,386,218) |
| Net purchases of premises and equipment | (11,487) | (23,066) | (16,623) |
| Net cash used in investing activities | (4,289,134) | (4,341,332) | (5,418,401) |
| **CASH FLOWS FROM FINANCING ACTIVITIES** | | | |
| Net increase in non-interest-bearing deposits | 663,159 | 832,509 | 1,953,229 |
| Net increase in interest-bearing deposits | 2,275,787 | 746,058 | 3,134,108 |
| Proceeds from the issuance of Federal Home Loan Bank borrowings | 3,595,000 | 3,660,000 | 1,225,000 |
| Repayment of Federal Home Loan Bank borrowings | (2,820,000) | (1,515,900) | (1,894,263) |
| Proceeds from the issuance of other borrowings | 820,000 | 715,000 | 568,000 |
| Repayment of other borrowings | (790,000) | (818,000) | (492,000) |
| Cash dividends paid on common stock | (62,005) | - | - |
| Proceeds from the issuance of subordinated debt, net | - | - | 256,032 |
| Tax benefit from stock-based compensation | - | - | 8,878 |
| Payments of employee taxes withheld from stock-based compensation | (20,761) | (27,828) | (26,965) |
| (Repurchase) issuance of common stock | (41,808) | - | 318,786 |
| Other | (12) | (4) | (3) |
| Net cash provided by financing activities | 3,619,360 | 3,591,835 | 5,050,802 |
| Net (decrease) increase in cash and cash equivalents | (18,211) | (203,485) | 197,405 |
| Cash and cash equivalents at beginning of year | 335,466 | 538,951 | 341,546 |
| Cash and cash equivalents at end of year | $ 317,255 | 335,466 | 538,951 |
| Supplemental disclosures of cash flow information: | | | |
| Interest paid during the year | $ 402,717 | 229,738 | 158,838 |
| Income taxes paid during the year | $ 107,527 | 177,142 | 265,781 |
| Transfer of repossessed assets to loans, at fair value | $ 73,864 | 35,154 | 19,061 |
| Excess servicing strips from the securitization of SBA loans | $ 94,018 | 87,557 | 102,604 |

See accompanying notes to Consolidated Financial Statements.

**SIGNATURE BANK**

**Notes to Consolidated Financial Statements**

## (1) Organization

Signature Bank (the "Bank" and together with its subsidiaries, the "Company," "we," or "us") is a New York State chartered bank. On April 5, 2001, the Bank received its charter from the New York State Banking Department (now known as the New York State Department of Financial Services) and commenced business on May 1, 2001. The Bank currently operates 30 private client offices located in the New York metropolitan area and one private client office on the West Coast, from which private client banking teams serve the needs of privately owned businesses, their owners and their senior managers.

The Bank operates Signature Financial LLC ("Signature Financial"), a specialty finance subsidiary focused on equipment finance and leasing, transportation, taxi medallion, commercial marine, and national franchise financing and/or leasing. Additionally, through our Signature Public Funding Corporation ("Signature Public Funding") subsidiary, the Bank provides a range of municipal finance and tax-exempt lending and leasing products to government entities throughout the country, including state and local governments, school districts, fire and police and other municipal entities. The Bank also operates Signature Securities Group Corporation ("Signature Securities"), a licensed broker-dealer and investment advisor offering investment, brokerage, asset management and insurance products and services.

## (2) Summary of Significant Accounting Policies

### *(a) Basis of Presentation and Consolidation*

The accompanying Consolidated Financial Statements of the Bank have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and practices within the banking industry. These financial statements have been prepared to reflect all adjustments necessary to present fairly the financial condition and results of operations as of the dates and for the periods shown. All significant intercompany accounts and transactions have been eliminated in consolidation. Certain reclassifications have been made to prior period financial statements to conform to the current period's presentation: To better align with recent regulatory guidance, in 2017 the Bank began using the acquisition, development and construction loan caption. Within this document, the change only impacted the loan and lease loss provision by loan portfolio segment in Note 8.

### *(b) Management's Use of Estimates*

The preparation of Consolidated Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

During 2016, there was a change in estimate related to the commercial real estate portfolio's general reserve loss factors. See Note 8 to our Consolidated Financial Statements for further discussion.

Our significant estimates include the adequacy of the allowance for loan and lease losses ("ALLL" or the "allowance").

### *(c) Cash and Cash Equivalents*

For the purpose of presentation in the Consolidated Statements of Cash Flows, we have defined cash and cash equivalents to include cash and due from banks and short-term investments with original maturities of 90 days or less. Short-term investments may consist of federal funds sold, interest-bearing deposits with banks and money market mutual funds.

Cash and cash equivalents at December 31, 2018 consisted of cash and due from banks of $269.2 million, interest-bearing deposits with banks of $11.6 million and money market mutual funds of $36.4 million. Cash and cash equivalents at December 31, 2017 consisted of cash and due from banks of $290.1 million, interest-bearing deposits with banks of $7.0 million and money market mutual funds of $38.4 million.

We are required by the Federal Reserve System to maintain non-interest bearing cash reserves equal to a percentage of certain deposits. The reserve requirement amounted to $401.3 million and $377.1 million for the periods that included December 31, 2018 and 2017, respectively.

***(d) Securities Available-for-Sale and Securities Held-to-Maturity***

The designation of a security as held-to-maturity ("HTM") is made at the time of acquisition. Securities that we have the positive intent and ability to hold to maturity are classified as HTM and carried at amortized cost. Amortization of premiums and accretion of discounts are recognized using the level yield method.

Securities classified as available-for-sale ("AFS") include debt securities that are carried at estimated fair value. Unrealized gains or losses on securities available-for-sale are included as a separate component of shareholders' equity, net of tax effect. Amortization of premiums and accretion of discounts are recognized using the level yield method. Realized gains and losses on sales of securities are computed using the specific identification method and are reported in non-interest income.

The Bank uses various inputs to determine the fair value of its investment portfolio, which are classified within a three-level fair value hierarchy based on the transparency and reliability of inputs to valuation methodologies. To the extent they are available, we use quoted market prices (Level 1) to determine fair value. If quoted market prices are not available, we use valuation techniques such as matrix pricing to determine fair value (Level 2). This technique leverages observable inputs including quoted prices for similar assets, benchmark yield curves, and other market corroborated inputs. In cases where there is little, if any, related market activity, fair value estimates are based upon internally-developed valuation techniques and assumptions such as discount rates, credit spreads, default and delinquency rates, and prepayment speeds (Level 3). A significant degree of judgment is involved in valuing investments using Level 3 inputs, and the use of different assumptions could have a positive or negative effect on our financial condition or results of operations. See Note 3 for more details on our security valuation techniques.

We regularly evaluate our securities to identify declines in fair value that are considered other-than-temporary. Our evaluation of securities for impairments is a quantitative and qualitative process, which is subject to risks and uncertainties. If the amortized cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, the duration and extent to which the fair value is less than amortized cost, the probability of a near-term recovery in value, whether we intend to sell the security and whether it is more likely than not that we will be required to sell the security before full recovery of our investment or maturity. We also consider specific adverse conditions related to the financial health, projected cash flow and business outlook for the investee, including industry and sector performance, operational and financing cash flow factors and rating agency actions. Once a decline in fair value is determined to be other-than-temporary, for equity securities, an impairment charge is recorded through current earnings based upon the estimated fair value of the security at time of impairment and a new cost basis in the investment is established. For debt investment securities deemed to be other-than-temporarily impaired, the investment is written down to fair value with the estimated credit loss charged to current earnings and the noncredit-related impairment loss charged to other comprehensive income (loss).

Securities are reviewed at least quarterly to determine if other-than-temporary impairment is present based on certain quantitative and qualitative factors. For securities other than securitized financial assets, the primary factors considered in evaluating whether a decline in value is other-than-temporary include: (a) the length of time and extent to which the fair value has been less than cost or amortized cost and the expected recovery period of the security, (b) the financial condition, credit rating, and future prospects of the issuer, (c) whether the debtor is current on contractually-obligated interest and principal payments, and (d) whether we intend to sell or whether we will be required to sell these instruments before recovery of their cost basis.

In performing our other-than-temporary impairment analysis for securitized financial assets with contractual cash flows (asset-backed securities, collateralized debt obligations, commercial mortgage-backed securities and mortgage-backed securities), we estimate future cash flows for each security based upon our best estimate of future delinquencies, estimated defaults, loss severity, and prepayments. We review the estimated cash flows to

determine whether we expect to receive all originally expected cash flows. Projected credit losses are compared to the current level of credit enhancement to assess whether the security is expected to incur losses in any future period and therefore would be deemed other-than-temporarily impaired.

Equity securities, including FHLB stock, which are not quoted on an exchange and not considered to be readily marketable are recorded at cost, less impairment (if any).

***(e) Loans Held for Sale***

Loans originated and held for sale in the secondary market are carried at the lower of cost or estimated fair value. Net unrealized losses, if any, are recognized through a valuation allowance by charges to current earnings. Gains or losses resulting from sales of loans held for sale, net of unamortized deferred fees and costs, are recognized at the time of sale and are included in net gains on sales of loans on the Consolidated Statements of Income.

***(f) Loans and Leases, Net***

Loans are carried at the principal amount outstanding, less unearned discounts, net of deferred loan origination fees and costs and the ALLL. Unearned income and net deferred loan fees and costs are accreted/amortized into interest income over the loan term on a basis that approximates the level yield method.

The accrual of interest income is generally discontinued at the time a loan becomes 90 days delinquent based on contractual terms. Other factors are also considered in determining whether a loan should be classified as nonaccrual, including whether the loan is to a borrower in an industry experiencing economic stress, whether the borrower is experiencing other issues such as inadequate cash-flow, or the nature of the underlying collateral and whether it is susceptible to deterioration in realizable value. In the case of commercial loans, residential mortgages, and home equity lines of credit, exceptions may be made if the loan has sufficient collateral value, based on a current appraisal, and is in process of collection. Additionally, an accruing loan that is modified as a troubled debt restructuring (“TDR”) may remain in accrual status if, based on a credit analysis, collection of principal and interest in accordance with the modified terms is reasonably assured, and the borrower demonstrated sustained historical repayment performance for a reasonable period prior to modification. In all cases, loans are placed on nonaccrual status or charged-off at an earlier date if collection of principal or interest is considered doubtful.

Once a loan is placed on nonaccrual status, our accounting policies are applied consistently, regardless of loan type. All interest previously accrued but not collected for loans that are placed on nonaccrual status is reversed against interest income. Payments received on nonaccrual loans are applied against the outstanding loan principal. Loans are returned to accrual status when all the principal and interest amounts contractually due are brought current and future payments are reasonably assured.

Impaired loans can include nonaccrual loans, TDRs and certain matured past due loans. Loans classified as TDRs include those loans where a borrower experiences financial difficulty and the Bank made certain concessionary modifications to contractual terms, such as a reduction of the stated interest rate or face amount of the loan, a reduction of accrued interest, or an extension of the maturity date(s) at a stated interest rate lower than the current market rate for a new loan with similar risk.

***(g) Allowance for Loan and Lease Losses***

The ALLL is established through a provision for loan and lease losses charged to current earnings. The ALLL is maintained at a level estimated by management to absorb probable losses inherent in the loan portfolio and is based on management’s continuing evaluation of the portfolio, the related risk characteristics, and the overall economic and environmental conditions affecting the portfolio. This estimation is inherently subjective as it requires measures that are susceptible to significant revision as more information becomes available.

Our methodology to calculate the general reserve portion of the ALLL consists of several components: first, we determine an ALLL based on quantitative loss factors for loans evaluated collectively for impairment. The quantitative loss factors are based primarily on historical loss rates by credit rating, after considering loan type, historical loss and delinquency experience, and loss emergence periods. The quantitative loss factors applied in the methodology are periodically re-evaluated and adjusted to reflect changes in historical loss levels, loss emergence periods, or other risks. Lastly, we allocate an ALLL based on qualitative loss factors. These qualitative

loss factors are designed to account for losses that may not be provided for by the quantitative loss component due to other factors evaluated by management.

More specifically, to determine the general reserve portion of our ALLL, we segment the loan portfolio into various components and apply various loss factors to estimate the amount of probable losses. The largest segment of our loan portfolio is comprised of credit-rated commercial loans, comprising 99.0% of our total loan portfolio, excluding loans held for sale, as of December 31, 2018. Our credit-rated commercial loans are further segmented by portfolio including commercial real estate loans, commercial and industrial loans, and commercial loans secured by 1-4 family residential property. Certain commercial and industrial loans are analyzed on a more granular level such as specialty finance loans and taxi medallion loans. For each loan portfolio segment, a credit rating is assigned based on a review of specific risk factors including (i) historical and projected financial results of the borrower, (ii) market conditions of the borrower's industry that may affect the borrower's future financial performance, (iii) business experience of the borrower's management, (iv) nature of the underlying collateral, if any, and (v) history of the borrower's payment performance.

When assigning a credit rating to a loan, we use an internal nine-level rating system in which a rating of one carries the lowest level of credit risk and is used for borrowers exhibiting the strongest financial condition. Loans rated one through six are deemed to be of acceptable quality and are considered "Pass." Loans that are deemed to be of questionable quality are rated seven (special mention). Loans with adverse classifications (substandard or doubtful) are rated eight or nine, respectively. A loan is considered substandard if it is inadequately protected by the current net worth and paying capacity of the borrower, or by the collateral pledged. Substandard loans are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected. Loans classified as doubtful have all of the weaknesses inherent in those classified substandard with the added characteristic that the weaknesses present make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable.

The outstanding amounts of credit-rated commercial loans within each loan portfolio segment are aggregated by credit rating, and we estimate the allowance for losses for each credit rating within each portfolio using loss factors based on the portfolio's historical loss experience. We supplement our historical loss experience by considering qualitative factors that may cause estimated losses to differ from our historical losses. These qualitative factors are intended to address developing external and environmental trends, and include adjustments for items such as changes in current economic and business conditions, changes in the nature and volume of our loan portfolio, the existence and effects of credit concentrations, the trend and severity of our problem loans, along with other external factors such as competition and legal and regulatory requirements. These qualitative adjustments reflect the imprecision that is inherent in the estimation of probable loan losses, and are intended to ensure adequacy of the overall allowance amount.

Our internal review process results in the periodic review of assigned credit ratings to reflect changes in specific risk factors. Commercial lines of credit are generally issued with terms of one year, and upon annual renewal, our lenders perform a full review of the specific risk factors to assess the appropriateness of the assigned credit ratings. Furthermore, loans classified as special mention, substandard or doubtful are placed on our internal watch list, and our lenders perform a credit rating review on a quarterly basis. A quarterly Problem Loan meeting is also conducted where loan officers discuss the status and prospects of each watchlist credit with the Chief Credit Officer, Chief Lending Officer, and other members of credit and accounting. Nonaccrual, risk rating change and charge-off decisions are contemplated at this meeting. In addition, our Risk Management function performs periodic credit reviews that provide an independent evaluation of the assigned credit ratings. These reviews include those loans with higher-risk attributes, and generally cover, in aggregate, between 20-30% of the commercial loan portfolio, including a sample of commercial loans with adverse credit ratings, as well as pass/watch ratings, on an annual basis. The results of these credit reviews are presented to both the Risk and the Credit Committees of the Board of Directors.

Our methodology to determine the ALLL for the non-rated segments of our loan portfolio is based on historical loss experience and qualitative factors. Non-rated loans include commercial loans with outstanding principal balances below $100,000, overdrafts, residential mortgages, and consumer loans. The outstanding amounts of loans in each of these segments are aggregated, and we apply percentages based on historical losses and assess qualitative factors by segment to estimate the required allowance. Non-rated loans comprise 1.0% of our total loan portfolio, excluding loans held for sale, as of December 31, 2018.

Finally, we allocate an ALLL based on qualitative loss factors dependent on both economic and portfolio-specific data that correlates with loan losses. These qualitative loss factors are designed to account for losses that may not be provided for by the quantitative loss component due to other factors evaluated by management, which include, but are not limited to:

- Changes in lending policies and procedures, including changes in underwriting standards and collection, and charge-off and recovery practices;
- Changes in economic and business conditions and developments that affect the collectability of the portfolio, including the condition of various market segments;
- Changes in the nature and volume of the portfolio and in the terms of loans;
- Changes in the volume and severity of past-due loans, the volume of nonaccrual loans, and the volume and severity of adversely classified or graded loans;
- Changes in the quality of our loan review system;
- Changes in the value of underlying collateral;
- The existence and effect of any concentrations of credit, and changes in the level of such concentrations;
- Changes in the experience, ability, and depth of lending management and other relevant staff; and
- The effect of other external factors, such as competition and legal and regulatory requirements.

We also assess the need for a specific allowance on impaired loans. A loan is considered impaired when, based on current information and events, it is probable that we will be unable to collect all amounts due in accordance with the original contractual terms of the loan agreement, including scheduled principal and interest payments. We consider all nonaccrual loans to be impaired loans, and the related specific allowances for losses are determined on an individual (non-homogeneous) basis. Factors contributing to the determination of specific allowances on impaired loans include the creditworthiness of the borrower and, more specifically, changes in the expected future receipt of principal and interest payments or, for collateral-dependent loans, the value of pledged collateral. We charge off loans, or portions of loans, in the period that such loans, or portions thereof, are deemed uncollectible. For collateral-dependent impaired loans in excess of $500,000, we generally record a charge-off when the carrying amount of the loan exceeds the fair value of collateral less estimated selling costs, if appropriate. For non-collateral dependent loans in excess of $500,000, a specific allowance is recorded when the carrying amount of the loan exceeds the discounted estimated cash flows using the loan's original effective interest rate. In developing the estimated cash flows (or expected future receipt of principal and interest payments), weight is given to the evidence consistent with the extent to which it can be verified objectively. All information is considered, including environmental factors, such as existing industry, geographical, economic and political factors. For smaller impaired loans, in the absence of other factors affecting the collectability of the loan, we generally determine the amount of specific allowance using estimated loss percentages based on the amount of time the loan has been impaired.

The methodology used in the periodic review of reserve adequacy, which is performed at least quarterly, is designed to be responsive to changes in portfolio credit quality and inherent credit losses. The changes are reflected in both the pooled formula reserve and in specific reserves as the collectability of larger classified loans is regularly recalculated with new information as it becomes available. Management is primarily responsible for assessing the overall adequacy of the allowance on a quarterly basis. In addition, reserve adequacy is also assessed by an internal Loan Quality Review Committee, which includes members of senior management, accounting, credit and risk management, and is presented to our Board of Directors for their review and consideration on a quarterly basis. Reserve adequacy is also assessed by our independent risk management function, which performs independent credit reviews and a validation of the allowance model employed.

In addition, bank regulators, as an integral part of their supervisory functions, periodically review our loan portfolio and related ALLL. These regulatory agencies may disagree with our methodology, which could result in changes to our current ALLL estimates or processes and result in an increase to our provision for loan and lease losses or

the recognition of further loan charge-offs based upon their judgments, which may be different from ours. An increase in the ALLL as a result of these judgments could materially adversely affect our financial condition and results of operations.

For economic reasons and to maximize the recovery of loans, we may work with borrowers experiencing financial difficulties and will consider modifications to a borrower's existing loan terms and conditions that we would not otherwise consider, commonly referred to as troubled debt restructurings ("TDRs"). We record a provision for impairment loss associated with TDRs, if any, based on the present value of expected future cash flows discounted at the original loan's effective interest rate or, if the loan is collateral dependent, based on the fair value of the collateral less estimated costs to sell, if appropriate. At the time of restructuring, we determine whether a TDR loan should accrue interest based on the accrual status of the loan immediately prior to modification. Additionally, an accruing loan that is modified as a TDR may remain in accrual status if, based on a credit analysis, collection of principal and interest in accordance with the modified terms is reasonably assured, and the borrower demonstrated sustained historical repayment performance for a reasonable period prior to modification. A nonaccrual TDR loan will be returned to accrual status when all the principal and interest amounts contractually due are brought current and future payments are reasonably assured. Additionally, there should be a sustained period of repayment performance (generally a period of six months) by the borrower in accordance with the modified contractual terms. In years after the year of restructuring, the loan is not reported as a TDR loan if it was restructured at a market interest rate and it is performing in accordance with its modified terms. Other TDRs, however, are reported as such for as long as the loan remains outstanding.

### *(h) Charge-off of Uncollectible Loans*

Loan losses are charged-off in the period the loans, or a portion thereof, are deemed uncollectible. For collateral dependent risk-rated commercial loans, charge-offs are generally recorded when the collateral value is less than the carrying value and in all cases no later than when we take possession of collateral. Charge-offs are generally measured as the excess of the loan carrying value over the estimated fair value of the collateral, net of selling costs. Fair value is estimated based on credible, verifiable indicators of value such as appraisals, cash-flow models, evaluations, documented discussions with brokers, or recent sales or market listings of comparable properties. In the case of other loan segments, including non-rated commercial loans, consumer loans, and residential mortgages, charge-offs are generally recorded when a loan reaches 180 days of delinquency unless there are extenuating circumstances that can be clearly evidenced. Such circumstances include loans that are well secured and in process of collection along with loans undergoing extensive restructuring/settlement discussions with the borrower.

### *(i) Loan Origination and Commitment Fees, and Loan Origination Costs*

Loan origination and commitment fees, and certain loan origination costs, are deferred and amortized into interest income on a basis that approximates the level yield method. Net commitment fees on revolving lines of credit are recognized in interest income on the straight-line method over the period the revolving line is active. Any fees or costs that are unamortized at the time a loan is paid off or a commitment is closed are recognized into income immediately.

### *(j) Securitizations*

The Bank purchases, securitizes and sells the government-guaranteed portions of U.S. Small Business Administration ("SBA") loans. When the Bank securitizes SBA loans, we may retain interest-only strips, which are generally considered residual interests in the securitized assets. These SBA interest-only strips are accounted for and classified as AFS securities. In addition, when sold, the SBA loans are removed from our Consolidated Statements of Financial Condition. Additionally, gains and losses upon sale of the securitized SBA loans depend, in part, on our allocation of the previous carrying amount of the loans to the retained interests. Previous carrying amounts are allocated in proportion to the relative fair values of the loans sold and interests retained. The Bank uses an internal valuation process to determine the fair value of its SBA interest-only strip securities.

The excess of cash flows expected to be received over the amortized cost of the retained interests is recognized as interest income using the effective yield method. If the fair value of the retained interest has declined below its carrying amount and there has been an adverse change in estimated cash flows of the underlying loans, then the decline in fair value is considered to be other-than-temporary and the retained interest is written down to fair value with a corresponding charge to earnings.

### *(k) Premises and Equipment*

Premises and equipment are stated at cost less accumulated depreciation and amortization. Depreciation of furniture, fixtures, and equipment is computed by the straight-line method over the estimated useful lives of the related assets. Furniture and fixtures are normally depreciated over seven years and equipment, computer hardware, and computer software are normally amortized over three years. Amortization of leasehold improvements is computed by the straight-line method over their estimated useful lives or the terms of the leases, whichever is shorter.

### *(l) Bank-Owned Life Insurance*

The Bank has purchased life insurance policies on certain employees. These Bank-owned life insurance ("BOLI") policies are carried at the amount that could be realized under our BOLI policies as of the date of the Consolidated Statements of Financial Condition and are included in Other assets. Increases in the carrying value are recorded as Other income in the Consolidated Statements of Income and insurance proceeds received are generally recorded as a reduction of the carrying value. The carrying value consists of cash surrender value of $64.3 million at December 31, 2018, and $63.5 million at December 31, 2017. There was no deferred acquisition cost as of December 31, 2018 and 2017. Our investment in BOLI generated income of $1.6 million, $2.2 million, and $2.9 million for the years ended December 31, 2018, 2017, and 2016, respectively.

### *(m) Repossessed Assets*

Repossessed assets are comprised of any property ("other real estate" or "ORE") or other asset acquired through loan restructurings, foreclosure proceedings, or acceptance of a deed-in-lieu of foreclosure. Repossessed assets are included in Other assets in the Consolidated Statements of Financial Condition and are carried at fair value, less estimated selling costs at the date of acquisition. Any valuation adjustments at the date of acquisition are recorded to the ALLL. Following foreclosure, management periodically performs a valuation of the property, and the asset is carried at the lower of the carrying amount or fair value, less estimated selling costs. Expenses incurred to maintain repossessed assets, unrealized losses resulting from write-downs after the date of acquisition, and realized gains and losses upon sale of the assets are included in other general and administrative expense and other losses, as appropriate. If a repossessed asset is subsequently contracted for sale and the transaction is financed by the Bank, to the extent uncertainty exists related to collectability of the financed amount at the time of sale, the repossessed asset will not be derecognized and all payments received will be recorded as a deposit liability until the uncertainty is resolved.

As of December 31, 2018 and 2017, our repossessed assets totaled $51.6 million and $28.8 million, respectively, and consisted primarily of taxi medallions. The December 31, 2018 balance includes taxi medallions totaling $27.4 million that were sold to new borrowers with financing provided by the Bank where collectability is uncertain. As of December 31, 2018, $5.6 million of payments have been received to date, leaving the remaining net exposure for these medallions at $21.8 million.

### *(n) Securities Sold Under Agreements to Repurchase*

When we maintain effective control over the underlying securities, securities sold under agreements to repurchase are accounted for as financings (rather than as sales) and the obligations to repurchase securities sold are reflected as liabilities in the Consolidated Statements of Financial Condition at the amounts at which the securities will be subsequently repurchased. All of our agreements have been accounted for as financings through December 31, 2018. The dollar amount of securities underlying the agreements remains in the asset accounts, although the securities underlying the agreements are delivered to the counterparties who arranged the transactions. In certain instances, the counterparties may have sold, loaned, or disposed of the securities to other parties in the normal course of their operations, and have agreed to resell to us substantially similar securities at the maturity of the agreements.

### *(o) Income Taxes*

Signature Bank files consolidated federal and combined New York State and New York City income tax returns with its subsidiaries, with the exception of Signature Preferred Capital, Inc. which files separately as a real estate investment trust for federal purposes. Additionally, there are state and local tax returns filed in various other jurisdictions on both a consolidated basis as well as a separate company basis.

Income tax expense consists of current and deferred income tax expense (benefit). Deferred income tax expense (benefit) is determined by recognizing deferred tax assets and liabilities for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and certain unused carry-forward deductions and credits. The realization of deferred tax assets is assessed and if necessary, a valuation allowance is provided to reduce the asset to the amount that will more likely than not be realized. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled and carry-forward deductions and credits are expected to be utilized. The effect on deferred tax assets and liabilities of a change in tax laws or rates is recognized in income tax expense in the period that includes the enactment date of the change.

Uncertain tax positions are recognized if they are more likely than not to be sustained upon examination, based on the technical merits of the position. The amount of tax benefit recognized is the largest amount of benefit that is greater than 50% likely of being realized upon settlement. We account for interest and penalties (if any) as a component of income tax expense in the Consolidated Statements of Income.

### *(p) Stock-Based Compensation*

For equity awards in exchange for employee services received, we recognize compensation expense for all stock-based compensation awards over the requisite service period with a corresponding credit to additional paid-in capital. For awards which have performance-based vesting conditions, recognition of stock-based compensation expense begins when the achievement of the performance conditions is probable. If the status of the recipient of an equity award changes from employee to non-employee and the vesting likelihood changes from improbable to probable, the modification is treated as a forfeiture of the old award and issuance of a new award. The full amount of compensation cost related to the new award will be measured under ASC 505-50, *Equity-Based Payments to Non-employees*, and recognized prospectively over the required requisite service period. Additionally, nonemployee awards are revalued each period end using the prevailing common stock price. Compensation expense is measured based on grant date fair value and is included in Salaries and benefits in our Consolidated Statements of Income.

### *(q) Earnings Per Common Share*

Basic earnings per common share is computed by dividing net income available to common shareholders by the weighted-average common shares outstanding during the year. Unvested stock awards with non-forfeitable rights to dividends, whether paid or unpaid, are considered participating securities and are included in the calculation of EPS using the two class method whereby net income is allocated between common stock and participating securities.

Diluted earnings per common share is computed by dividing income allocated to common stockholders for basic EPS, adjusted for earnings reallocated from participating securities, by the weighted average number of common shares outstanding for the period for the dilutive effect of unvested stock awards using the treasury stock method.

Diluted earnings per common share includes the potential dilutive effect of stock options and warrants outstanding, and the unvested portions of restricted stock awards. The dilutive effect is calculated using the treasury stock method.

### *(r) Derivative Instruments and Hedging Activities*

The Company utilizes derivative instruments as part of its asset/liability management strategies and to facilitate our client risk management needs. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to changes in the fair value of an asset, liability, or firm commitment attributable to a particular risk, such as interest rate risk, are considered fair value hedges. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Derivatives may also be designated as hedges of the foreign currency exposures for foreign currency swaps that were entered to accommodate our borrowers.

Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may also enter into derivative contracts that are intended to economically hedge certain of its risk, even though hedge accounting does not apply or the Company elects not to apply hedge accounting.

For derivatives designated as cash flow hedges, the gain or loss on the derivative is recorded in Accumulated other comprehensive income and subsequently reclassified into interest expense in the same period during which the hedged transaction affects earnings. Amounts reported in accumulated other comprehensive income related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate liabilities.

For derivatives designated as fair value hedges, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in interest income. On a quarterly basis, the Company assesses the effectiveness of each hedging relationship by comparing the changes in cash flows or fair value of the derivative hedging instrument with the changes in cash flows or fair value of the designated hedged item or transaction. If a hedging relationship is terminated due to ineffectiveness, and the derivative instrument is not re-designated to a new hedging relationship, the subsequent change in fair value of such instrument is charged directly to earnings. Derivatives not designated as hedges do not meet the hedge accounting requirements. Changes in fair value of derivatives not designated in hedging relationships are recorded directly in earnings. The Company calculates the credit valuation adjustments to the fair value of derivatives on a net basis by counterparty portfolio, as an accounting policy election under the provisions of ASU 2011-04, *Fair Value Measurement (Topic 820), Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs.*

Derivative assets and liabilities are reported in Other assets and Other liabilities, respectively, within the Consolidated Statements of Financial Condition.

### *(s) Segment Reporting*

The Bank is organized into two reportable segments representing our core businesses – Commercial Banking and Specialty Finance. To identify our reportable segments, management considers the financial information reviewed by the Chief Operating Decision Maker (CODM), our executive compensation structure, the Bank's internal operating structure, nature of products and services offered, how products and services are provided to our clients, and the nature of the regulatory environment, among other aspects pursuant to the relevant accounting guidance. The primary determinants of our reportable segments include our internal operating structure, the nature of products and services offered, and how products and services are provided to our clients.

### (t) New Accounting Standards

#### (i) Not Yet Adopted

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting.* The standard simplifies the accounting for shared-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. Equity-classified nonemployee awards will be measured on the grant date, rather than on the earlier of (1) the performance commitment date or (2) the date at which the nonemployee's performance is complete. The standard requires a cumulative-effect adjustment to retained earnings as of the beginning of the annual period of adoption. Subsequent to year-end, the Company adopted ASU 2018-07 as of January 1, 2019. The adoption of ASU 2018-07 had zero impact on the Company's Consolidated Financial Statements because the compensation expense recognized for eligible restricted stock awards to nonemployees was based on the shares' fair value measurement as of December 31, 2018 (and on January 1, 2019, the adoption date).

In February 2018, the FASB issued ASU 2018-02, *Income Statement –Reporting Comprehensive Income (Topic 220).* The standard provides entities with an option to reclassify tax effects stranded in accumulated other comprehensive income as a result of the Tax Cuts and Jobs Act enacted in December 2017 to retained earnings as compared to income tax expense. The new standard can be applied either (1) in the period of adoption or (2) retrospectively to each period in which the effect of the change in the federal income tax rate is recognized.

Subsequent to year-end, the Company adopted ASU 2018-02 as of January 1, 2019 but made no election to reclassify the stranded OCI to retained earnings as permitted by the standard. Therefore, this standard had no impact on the Company's Consolidated Financial Statements. The Company will reclassify these stranded tax effects using the individual security approach. As securities with stranded effects mature or are sold, the associated amounts will be reclassified.

In March 2017, the FASB issued ASU 2017-08, *Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities*. The standard shortens the amortization period for certain purchased callable debt securities held at a premium to the earliest call date. The guidance does not change the accounting for discount accretion. Subsequent to year-end, the Company adopted ASU 2017-08, which impacted a very limited number of securities. We recognized additional amortization of $147,000 as a cumulative adjustment to retained earnings as of January 1, 2019.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which requires lessees to recognize most leases on-balance sheet. Lessor accounting will remain substantially the same, but the ASU contains changes intended to align lessor accounting with the lessee accounting model. The ASU replaces most existing lease accounting guidance and requires expanded quantitative and qualitative disclosures for both lessees and lessors. In July 2018, the FASB issued ASU 2018-11, *Leases – Targeted Improvements (Topic 842)*, which provides entities a transition option to initially apply the new leases standard at the effective date, e.g. January 1, 2019 for the Company, and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption without restating comparative periods presented in the financial statements. Further amending the new leases standard, in December 2018, the FASB issued ASU 2018-20, *Leases (Topic 842)*, which allows lessors to make an accounting policy election to not evaluate whether sales taxes and other similar taxes are lessor costs. The ASU also requires lessors to exclude lessor costs paid directly by lessees to third parties on the lessor's behalf from variable payments but to include lessor costs that are reimbursed by the lessees in the measurement of variable lease revenue and the associated expense. The effective date of this ASU is the same as other Leases related ASUs, which is January 1, 2019.

Subsequent to year-end, the Company adopted the three above-mentioned ASUs related to *Leases (Topic 842)* as of January 1, 2019. We elected the transition option as provided in ASU 2018-11 to initially apply the new leases standard as of January 1, 2019. In addition, we elected the transition practical expedient package which allowed us not to reassess 1) whether any contracts are or contain embedded leases; 2) the lease classification for any leases; and 3) whether initial direct costs meet the new definition, as of the initial adoption date at January 1, 2019. From the lessee perspective, no embedded leases were identified and we recognized upon adoption, a Right of Use ("ROU') asset of $232.0 million and a lease liability of $251.5 million primarily related to real estate leases existing on January 1, 2019. From the lessor perspective, the related accounting is unchanged, except that certain initial direct costs are no longer eligible for capitalization. Additionally, the classification for certain leases will change from direct financing to sales-type when the control is deemed to have transferred, i.e., the residual value is guaranteed solely by the lessee, which only has disclosure implications for the Company. These changes will have minimal impact on the Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement.* This ASU eliminates, and modifies certain disclosure requirements for fair value measurements. It also adds new disclosure requirements for Level 3 instruments, such as changes in unrealized gains and losses included in Other comprehensive income, the range and weighted average of significant unobservable inputs and narrative description of the measurement uncertainty. The guidance is effective for fiscal years beginning after December 15, 2019, but entities are permitted to early adopt either the entire standard or only the provisions that eliminate or modify the existing requirements. Retrospective transition is required for most amendments while others require prospective application, e.g., the new disclosure requirements related to Level 3 fair value measurements. The Company is currently assessing the impact to its Consolidated Financial Statements; however, the impact is not expected to be material.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which employs a new accounting model, referred to as the current expected credit losses (CECL) model. The standard is intended to require earlier recognition of credit losses, while also providing additional financial reporting transparency about credit risk.

The new CECL model utilizes an "expected credit loss" measurement objective for the recognition of credit losses for loans, loan commitments and held-to-maturity securities at the time the asset is originated or acquired. The estimate is then adjusted each period for changes in expected credit losses. For available-for-sale debt securities where fair value is less than cost, credit-related impairment would be recognized in an allowance for credit losses and adjusted each period for changes in credit risk. This would replace the multiple existing impairment models in GAAP, which generally require that a loss be incurred before it is recognized.

The standard also expands the disclosure requirements regarding an entity's assumptions, models, and methods for estimating the ALLL. Notably, public entities will also need to disclose the amortized cost balance for each class of financial asset by credit quality indicator, disaggregated by the year of origination (i.e., by vintage year).

The standard is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years and requires a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. A prospective transition approach is required for debt securities for which an other-than-temporary impairment had been recognized before the effective date. Early adoption is permitted as of the fiscal years beginning after December 15, 2018. The CECL model represents a significant departure from current GAAP, and may result in material changes to the Company's accounting for financial instruments. The Company is currently evaluating the impact of this standard through the monitoring and governance of a Steering Committee comprised of executives from the applicable areas of the organization. The Steering Committee's focus is to evaluate the impact to the organization, monitor status, as well as to assess and mitigate risks to the implementation of the standard.

In early 2018, the Company completed its gap analysis and identified areas of focus for an effective adoption. After finalizing model selection in the third quarter of 2018, the Company is currently working with its vendors on model development. We anticipate finalizing model development and integrating the models with the broader IT infrastructure in early 2019. In addition, the Company completed scoping of the standard to ensure that all financial instruments have been appropriately evaluated under the standard. The scoping exercise resulted in the conclusion of a zero credit loss assumption for certain United States Treasury bills as well as held-to-maturity("HTM") debt securities issued by government sponsored organizations ("GSEs"), which is the significant majority of our HTM securities portfolio.

Throughout 2019, the Company expects to continue to devote a significant amount of time to the implementation process, including the design of new or enhanced processes and controls, user acceptance testing, as well as parallel run activities. The adoption of this standard could have a material impact on the Company's Financial Statements depending on the characteristics of our loan portfolio, as well as the current and forecasted economic conditions as of the date of adoption.

**(ii) Recently Adopted**

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40), Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU aligns the requirements for capitalizing implementation costs in a Cloud Computing Arrangement service contract with the requirements for capitalizing implementation costs incurred for an internal-use software license. Implementation costs incurred by customers in a cloud computing arrangement are to be deferred and recognized over the term of the arrangement, if those costs would be capitalized by the customer in a software licensing arrangement under the internal-use software guidance. The Company early adopted this ASU as of September 30, 2018 with retrospective transition to capitalize implementation costs incurred for new systems, primarily related to loan operations. The impact to the Company is limited to financial statement presentation. Specifically, the capitalized asset and amortization expense in both the Consolidated Statement of Financial Condition and the Consolidated Statements of Income changed for new cloud based software. The capitalization of eligible implementation costs is recorded in the Consolidated Statement of Financial Condition in Other assets, instead of Premises and equipment, net. The associated amortization is recorded in Information technology expense instead of Other general and administrative expenses in the Consolidated Statement of Income.

In February 2018, the FASB issued ASU 2018-03, *Technical Corrections and Improvements to Financial Instruments – Overall (Topic 825).* The standard amended the new guidance issued in ASU 2016-01 on recognizing and measuring financial instruments. ASU 2018-03 clarified that entities measuring an equity security

using the measurement alternative may change its measurement approach to a fair value method in accordance with *Topic 820, Fair Value Measurement*, through an irrevocable election that would apply to that security and all identical or similar investments of the same issuer. It also clarified that the adjustments made under the measurement alternative are intended to reflect the fair value of the security as of the date that the observable transaction for a similar security took place. In addition, the new standard clarified that the prospective transition approach for equity securities without a readily determinable fair value in ASU 2016-01 is meant only for equity securities an entity may elect to measure using the measurement alternative. The Company adopted these amendments as of June 30, 2018 with no impact to its Consolidated Financial Statements.

In August 2017, the FASB issued ASU 2017-12**,** *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities,* which changes the recognition and presentation requirements of hedge accounting, including: eliminating the requirement to separately measure and report hedge ineffectiveness; and presenting all items that affect earnings in the same income statement line item as the hedged item. The ASU also provides new alternatives for applying hedge accounting to additional hedging strategies; measuring the hedged item in fair value hedges of interest rate risk; reducing the cost and complexity of applying hedge accounting by easing the requirements for effectiveness testing, hedge documentation and application of the critical terms match method; and reducing the risk of material error correction if a company applies the shortcut method inappropriately. The Company early adopted this ASU on April 1, 2018. The guidance did not have an impact on our derivatives on the date of adoption and thus there was no impact to the Consolidated Financial Statements through June 30, 2018. However, during the latter half of 2018, we entered into partial term fair value hedges to hedge certain fixed rate loans held for investment. These hedges are expected to be highly effective in offsetting changes in the fair value of the hedged loans. The related hedging relationships are designated as fair value hedges under the "last-of-layer" method, a new approach provided by ASU 2017-12. Gains and losses on derivatives instruments designated as fair value hedges, as well as changes in fair value on the hedged item, are recorded in Interest income for loans and leases, net in the Consolidated Statements of Income. See Note 20 to the Consolidated Financial Statements for further discussion.

In October 2018, the FASB issued ASU 2018-16**,** *Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedging Accounting Purposes.* The ASU  adds the overnight index swap rate based on the Secured Overnight Financing Rate to the list of US benchmark interest rates in ASC 815 that are eligible to be hedged. This guidance is effective when an entity adopts the new hedging guidance in ASU 2017-12, which the Company early adopted on April 1, 2018. The new ASU had no impact to the Consolidated Financial Statements.

In May 2017, the FASB issued ASU 2017-09, Compensation—Stock Compensation (Topic 718): The standard clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is applied only if the fair value, the vesting conditions, and the classification of the award (as an equity or liability instrument) change as a result of the change in terms or conditions. The ASU's amendments will be applied prospectively to awards modified on or after the effective date. The Company adopted the applicable requirements for ASU 2017-09 on January 1, 2018 with no impact to the Consolidated Financial Statements.

In November 2016, the FASB issued ASU 2016-18, *Restricted Cash*. This ASU amended the guidance in ASC Topic 230, Statement of Cash Flows, and is intended to reduce the diversity in the classification and presentation of changes in restricted cash on the statement of cash flows. The amendments within this ASU required that the reconciliation of the beginning-of-period and end-of-period cash and cash equivalents amounts shown on the statement of cash flows include restricted cash and restricted cash equivalents. If restricted cash and restricted cash equivalents are presented separately from cash and cash equivalents on the balance sheet, an entity is required to reconcile the amounts presented on the statement of cash flows to the amounts on the balance sheet. An entity is also required to disclose information regarding the nature of the restrictions. ASU 2016-18 required retrospective application and was adopted by the Company as of January 1, 2018. The adoption of ASU 2016-18 had no impact to our Statement of Cash Flows. The Bank did not have any restricted cash as of December 31, 2018 and prior comparative periods presented in the Statement of Cash Flows.

In August 2016, the FASB issued ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments—Statement of Cash Flows (Topic 230)*, which addressed several classification issues related to statement of cash flows presentation. The cash flow types impacted are: debt prepayment or debt extinguishment costs, settlement of zero-coupon bonds, contingent consideration payments made after a business combination, proceeds from the

settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies, distributions received from equity method investees, and beneficial interests in securitization transactions. The guidance also discusses separately identifiable cash flows and the application of the predominance principle for cash flows with multiple class types. The Company adopted ASU 2016-15 on January 1, 2018. Upon adoption, proceeds from settlement of bank-owned life insurance policies from "Cash flows from operating activities" were reclassified to "Cash flows from investing activities." In addition, we disclosed our retained beneficial interest, which represents the excess servicing strips resulted from the securitization of SBA loans in "Non-cash investing activities." Retrospective disclosure was applied for each period presented in the Consolidated Financial Statements.

In April 2016, the FASB issued ASU 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which simplified various aspects related to how share-based payments are accounted for and presented in the financial statements. Since adoption, excess tax benefits and certain tax deficiencies for share-based payments are recorded as income tax expense or benefit within the Consolidated Statements of Income, rather than within Additional paid-in capital. Other amendments included changes to the tax rate an employer can withhold for income taxes on vested awards without triggering application of liability accounting, accounting for forfeitures and certain changes to presentation in the statement of cash flows, and changes to the earnings per share calculation related to the excess tax benefit. The Company adopted the applicable requirements for ASU 2016-09 on January 1, 2017 with no impact to our financial condition or results of operations. Upon adoption, the Company made an accounting policy election to account for forfeitures of restricted stock awards as they occur, as opposed to estimate forfeitures when recording compensation expense. The required Statement of Cash Flow changes were also applied in the current period. The classification of employee taxes paid within the Consolidated Statements of Cash Flows when an employer withholds shares for tax-withholding purposes was adopted on a retrospective basis, as required by the ASU. Additionally, following the adoption of this standard and due to restricted stock vestings, for the years ended December 31, 2018 and 2017, tax benefits of $3.3 million and $6.5 million, respectively, were recorded within Income tax expense in the Consolidated Statements of Income.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which addressed certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. As it relates to the Company, the ASU required equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with the changes in fair value recognized in net income, thus eliminating eligibility for the current available-for-sale category. However, the Federal Reserve Bank and the Federal Home Loan Bank stock are not in scope of the ASU and will continue to be presented at cost. The Company adopted ASU 2016-01 as of January 1, 2018. The initial adoption impact on the Consolidated Financial Statements was limited to a $1.2 million reclassification of unrealized losses related to the in-scope equity securities from Accumulated other comprehensive loss to Retained earnings. Subsequent fair value changes recognized in Net income for the year ended December 31, 2018 were not material.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, which required an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The Company adopted ASU 2014-09 as of January 1, 2018 using the modified retrospective method, which included presenting the cumulative effect of initial adoption along with supplementary disclosures. The Company determined the majority of our revenue streams to be out-of-scope since our primary revenue streams are accounted for in accordance with financial instrument standards. With respect to the two revenue streams that are in-scope, fees and service charges related to deposit accounts, as well as commissions, the Company determined there is little to no impact to the Consolidated Financial Statements on the recognition of revenues due to the short duration of the related contracts with customers and the transactional nature of the related fees.

However, the standard has impacted and will continue to impact how the Company accounts for certain bank/seller financed sales of repossessed assets. Specifically, to the extent uncertainty exists related to collectability of financing payments at the time of sale consummation, the repossessed asset will remain on the Consolidated Statements of Financial Condition until that uncertainty is resolved. Under legacy GAAP in this situation, the Company derecognized the repossessed asset and a nonaccrual loan was recorded. In addition, if a sale is financed by the Company and financing terms are not consistent with market terms, a transaction price adjustment may be required. Both of these factors could impact the sale of the repossessed asset in a distressed market (i.e., taxi medallions). The cumulative impact from transaction price adjustments from bank/seller financed

sales of repossessed assets that were nonaccrual loans upon initial adoption on January 1, 2018 was $1.8 million. Additionally, as there is uncertainty related to the collectability of previously sold taxi medallions (i.e., nonaccrual loans upon adoption), $10.1 million of nonaccrual loans related to historical Bank-financed sales of repossessed taxi medallions were reclassed to repossessed assets (Other assets) upon adoption. In conjunction with this, $0.6 million of historical principal and interest payments related to these sold repossessed assets were reclassified from nonaccrual loans to Accrued expenses and other liabilities in accordance with the deposit method. Therefore, in total, this resulted in a $10.7 million increase in repossessed assets. Potential impact of future bank/seller financed sales of repossessed assets subsequent to the adoption could vary depending on the specific terms of the sale/financing and the collectability assessment of the financed amount. Overall, the adoption did not have a material impact on the Company's Consolidated Financial Statements.

## (3) 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. Fair value measurements are recorded on a recurring basis for certain assets and liabilities when fair value is the measure for accounting purposes, such as investment securities classified as available-for-sale and derivatives. Certain other assets and liabilities are measured at fair value on a non-recurring basis and are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment.

U.S. GAAP establishes a three-level fair value hierarchy that prioritizes techniques used to measure the fair value of assets and liabilities, based on the transparency and reliability of inputs to valuation methodologies. The three levels are defined as follows:

- Level 1 – Valuations are based on quoted prices in active markets for identical assets or liabilities. Accordingly, valuation of these assets and liabilities does not entail a significant degree of judgment. Examples include most U.S. Treasury securities and exchange-traded equity securities.

- Level 2 – Valuations are based on either quoted prices in markets that are not considered to be active or significant inputs to the methodology that are observable, either directly or indirectly. Examples include U.S. Government Agency securities, municipal bonds, corporate bonds, certain residential and commercial mortgage-backed securities, deposits, and most structured notes.

- Level 3 – Valuations are based on inputs to the methodology that are unobservable and significant to the fair value measurement. These inputs reflect management's own judgments about the assumptions that market participants would use in pricing the assets and liabilities. Examples include certain commercial loans, certain residential and commercial mortgage-backed securities, private equity investments, and complex over-the-counter derivatives.

**Valuation Methodology**

The Bank has an established and documented process for determining fair values. The Bank uses quoted market prices, when available, to determine fair value and classifies such items as Level 1. In many cases, the Bank utilizes valuation techniques, such as matrix pricing, to determine fair value, in which case the items are classified as Level 2. Fair value estimates may also be based upon internally-developed valuation techniques that use current market-based inputs such as discount rates, credit spreads, default and delinquency rates, and prepayment speeds. Items valued using internal valuation techniques are classified according to the lowest level input that is significant to the valuation, and are typically classified as Level 3.

We utilize independent third-party pricing sources to value most of our investment securities. In order to ensure the fair valuations obtained are appropriate, we typically compare data from two or more independent third-party pricing sources. If there is a price discrepancy greater than thresholds established by management between two pricing sources for an individual security, we utilize industry market spread data to assist in determining the most appropriate valuation. In addition, the third-party pricing sources have an established challenge process in place for all security valuations, which facilitates identification and resolution of potentially erroneous prices. We believe that the prices received from our pricing sources are representative of prices that would be received to sell the assets at the measurement date (exit prices) and are classified appropriately in the hierarchy.

The valuations provided by the pricing services are derived from quoted market prices or using matrix pricing. Matrix pricing is a valuation technique consistent with the market approach of determining fair value. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets. Matrix pricing is a mathematical technique used principally to value debt securities without relying exclusively on quoted prices of specific securities, but rather on the securities' relationship to other benchmark quoted securities. This technique leverages observable inputs including quoted prices for similar assets, benchmark yield curves, and other market corroborated inputs. Most of our securities portfolio is priced using this method, and as such, these securities are classified as Level 2.

Securities are classified within Level 3 of the valuation hierarchy in cases where there is limited activity or less transparency around inputs to the valuation. In these cases, the valuations are determined based upon an analysis of the cash flow structure and credit analysis for each position. Relative market spreads are utilized to discount the cash flow to determine current market values, as well as analysis of relative coverage ratios, credit enhancements, and collateral characteristics. Small Business Administration ("SBA") interest-only strip securities, pooled trust preferred securities, and private collateralized mortgage obligations ("CMOs") are all included in the Level 3 fair value hierarchy.

Markets for SBA interest-only strip securities are relatively inactive, with limited observable secondary market transactions. Our SBA interest-only strip securities are classified as other debt securities available-for-sale ("AFS") and reported at fair value, with changes in fair value recognized in accumulated other comprehensive loss. The securities are valued using Level 3 inputs and had fair values of $152.8 million at December 31, 2018 and $124.9 million at December 31, 2017. Since the cash flows of the SBA interest-only strip securities are guaranteed by the U.S. Government, there is limited credit risk involved. Therefore, the primary assumption built into the pricing model to generate the projected cash flows used to compute the fair values of the SBA interest-only strip securities is the discount yield. If the discount yield were to change by 100 basis points, the fair values of our SBA interest-only strip securities would increase or decrease accordingly by approximately 2%. The Bank determined the inputs to the discounted cash flow model based on historical performance and information provided by brokers.

Our pooled trust preferred securities are classified as AFS and had fair values of $20.9 million at December 31, 2018 and $18.4 million at December 31, 2017. Due to a relatively inactive market for pooled trust preferred securities with limited observable secondary market transactions, the fair values of these securities are determined using a discounted cash flow analysis. Unobservable inputs are used in the discounted cash flow model, the most significant of which is the market risk premium. If this assumption were to change by 300 basis points, the fair values of our Level 3 pooled trust preferred securities would increase or decrease accordingly by approximately 30%.

Level 3 private CMOs classified as AFS had fair values of $9.5 million at December 31, 2018 and $11.3 million at December 31, 2017. The fair values for these securities are determined based upon a discounted cash flow model, with the market risk premium as the most significant unobservable input. If this assumption were to change by 300 basis points, the fair values of our Level 3 private CMOs would increase or decrease accordingly by approximately 5%.

### Financial Instruments Measured at Fair Value on a Recurring Basis

The following table presents the assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2018 and 2017, classified according to the three-level valuation hierarchy:

| *(in thousands)* | | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | Total Carrying Value |
|---|---|---|---|---|---|
| **December 31, 2018** | | | | | |
| **ASSETS** | | | | | |
| Securities available-for-sale: | | | | | |
| U.S. Treasury securities | $ | 32,894 | - | - | 32,894 |
| Residential mortgage-backed securities: | | | | | |
| U.S. Government Agency | | - | 43,707 | - | 43,707 |
| Government-sponsored enterprises | | - | 1,513,294 | - | 1,513,294 |
| Collateralized mortgage obligations: | | | | | |
| U.S. Government Agency | | - | 239,343 | - | 239,343 |
| Government-sponsored enterprises | | - | 3,889,617 | - | 3,889,617 |
| Private | | - | 460,601 | 9,531 | 470,132 |
| Securities of U.S. states and political subdivisions: | | | | | |
| Municipal Bond - Taxable | | - | 6,554 | - | 6,554 |
| Other debt securities: | | | | | |
| Commercial mortgage-backed securities | | - | 109,988 | - | 109,988 |
| Single issuer trust preferred & corporate debt securities | | - | 444,324 | - | 444,324 |
| Pooled trust preferred securities | | - | - | 20,928 | 20,928 |
| Other | | - | 378,032 | 152,791 | 530,823 |
| Total securities available-for-sale | | 32,894 | 7,085,460 | 183,250 | 7,301,604 |
| Equity securities (1) | | - | 21,043 | - | 21,043 |
| Derivatives | | - | 3,629 | - | 3,629 |
| Total assets | $ | 32,894 | 7,110,132 | 183,250 | 7,326,276 |
| **LIABILITIES** | | | | | |
| Derivatives | | - | 985 | 53 | 1,038 |
| Total liabilities | $ | - | 985 | 53 | 1,038 |
| **December 31, 2017** | | | | | |
| **ASSETS** | | | | | |
| Securities available-for-sale: | | | | | |
| U.S. Treasury securities | $ | 24,726 | - | - | 24,726 |
| Residential mortgage-backed securities: | | | | | |
| U.S. Government Agency | | - | 32,282 | - | 32,282 |
| Government-sponsored enterprises | | - | 1,494,890 | - | 1,494,890 |
| Collateralized mortgage obligations: | | | | | |
| U.S. Government Agency | | - | 245,724 | - | 245,724 |
| Government-sponsored enterprises | | - | 3,713,775 | - | 3,713,775 |
| Private | | - | 388,425 | 11,259 | 399,684 |
| Securities of U.S. states and political subdivisions: | | | | | |
| Municipal Bond - Taxable | | - | 7,550 | - | 7,550 |
| Other debt securities: | | | | | |
| Commercial mortgage-backed securities | | - | 128,213 | - | 128,213 |
| Single issuer trust preferred & corporate debt securities | | - | 400,823 | - | 400,823 |
| Pooled trust preferred securities | | - | - | 18,356 | 18,356 |
| Other | | - | 341,761 | 124,875 | 466,636 |
| Equity securities (1) | | - | 21,060 | - | 21,060 |
| Total securities available-for-sale | | 24,726 | 6,774,503 | 154,490 | 6,953,719 |
| Derivatives | | - | 2,373 | - | 2,373 |
| Total assets | $ | 24,726 | 6,776,876 | 154,490 | 6,956,092 |
| **LIABILITIES** | | | | | |
| Derivatives | $ | - | 2,673 | 27 | 2,700 |
| Total liabilities | $ | - | 2,673 | 27 | 2,700 |

(1) Equity securities represent Community Reinvestment Act ("CRA") qualifying closed-end bond fund investments. Effective January 1, 2018, we adopted ASU 2016-01 (*Amendments to Financial Instruments- Recognition and Measurement of Financial Assets*). Accordingly, we reclassified CRA securities from the available-for-sale category to other assets.

**Changes in Level 3 Fair Value Measurements**

We recognize transfers between levels of the valuation hierarchy at the end of reporting periods. There were no transfers of assets between Level 1 and Level 2 for the years ended December 31, 2018 and 2017. Additionally, the following table presents information for AFS securities and derivatives measured at fair value on a recurring basis and classified by the Bank within Level 3 of the valuation hierarchy for the periods indicated:

| | *Fair Value Measurements Using Significant Unobservable Inputs (Level 3)* | |
|---|---|---|
| *(in thousands)* | **AFS Securities** | **Derivative Liabilities** |
| **Year ended December 31, 2018** | | |
| Beginning balance - Level 3 | $ 154,490 | (27) |
| Formation of SBA interest-only strip securities | 94,018 | - |
| Purchase of risk participation agreement | - | (203) |
| Termination of risk participation agreement | - | 1 |
| Transfers into Level 3 | - | - |
| Transfers out of Level 3 | - | - |
| Total gains or (losses) (realized/unrealized): | - | - |
| Included in earnings | - | - |
| Non-interest income | 802 | 176 |
| Interest income | (24,970) | - |
| Included in other comprehensive income | (13,898) | - |
| Sale of AFS securities | (27,192) | - |
| Ending balance - Level 3 | $ 183,250 | (53) |
| **Year ended December 31, 2017** | | |
| Beginning balance - Level 3 | $ 164,580 | (69) |
| Formation of SBA interest-only strip securities | 87,557 | - |
| Purchase of risk participation agreement | - | (38) |
| Transfers into Level 3 | - | - |
| Transfers out of Level 3 | - | - |
| Total gains or (losses) (realized/unrealized): | | |
| Included in earnings | | |
| Non-interest income | 2,914 | 80 |
| Interest income | (21,377) | - |
| Included in other comprehensive income | (1,595) | - |
| Sale of AFS securities | (77,589) | - |
| Ending balance - Level 3 | $ 154,490 | (27) |

### Assets Measured at Fair Value on a Non-recurring Basis

Certain assets are measured at fair value on a non-recurring basis. These assets are not measured at fair value on an on-going basis but are subject to fair value adjustments only in certain circumstances, such as when there is impairment or when an adjustment is required to reduce the carrying value to the lower of cost or fair value. These assets may include collateral-dependent impaired loans, securities held-to-maturity ("HTM") that are other-than-temporarily impaired, loans held-for-sale, repossessed assets, and certain long-lived assets.

The following table presents the assets that were measured at fair value on a non-recurring basis as of December 31, 2018 and 2017, classified according to the three-level valuation hierarchy:

| *(in thousands)* | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | Total Carrying Value |
|---|---|---|---|---|
| **December 31, 2018** | | | | |
| Collateral-dependent impaired loans: | | | | |
| Commercial property | $ - | - | 135 | 135 |
| 1-4 family residential property | - | - | 1,710 | 1,710 |
| Home equity lines of credit | - | - | 2,909 | 2,909 |
| Commercial and industrial (1) | - | - | 88,495 | 88,495 |
| Other repossessed assets | - | - | 26,020 | 26,020 |
| Total assets | $ - | - | 119,269 | 119,269 |
| **December 31, 2017** | | | | |
| Collateral-dependent impaired loans: | | | | |
| 1-4 family residential property | $ - | - | 325 | 325 |
| Home equity lines of credit | - | - | 765 | 765 |
| Commercial and industrial (1) | - | - | 301,649 | 301,649 |
| Other repossessed assets | - | - | 28,230 | 28,230 |
| Total assets | $ - | - | 330,969 | 330,969 |

(1) Includes $82.6 million and $297.7 million of taxi medallion loans as of December 31, 2018 and December 31, 2017, respectively.

Impaired loans that are secured by collateral ("collateral-dependent loans") are reported at the fair value of the underlying collateral, less selling costs, as applicable. Fair value estimates for collateral-dependent loans are determined based on individual appraisals that may be discounted by management for unobservable factors resulting from its knowledge of the property. In the table above, the predominance of the commercial and industrial loans are taxi medallion loans. To measure these collateral-dependent loans at fair value on a non-recurring basis, the taxi medallion fair value is based on recent market transfer values, with more weight placed on our own transactions given the transparency into the corresponding deal terms. See Note 8 to our Consolidated Financial Statements for further discussion.

Fair value adjustments for collateral-dependent impaired loans are recorded through direct loan charge-offs and/or through a specific allocation of the ALLL. During the years ended December 31, 2018, 2017, and 2016, we recorded fair value adjustments on collateral-dependent impaired loans totaling $105.4 million, $243.4 million and $91.0 million, respectively. The current year adjustments principally related to the New York City taxi medallion portfolio due to a further significant decline in the underlying collateral value in the first quarter of 2018. See Note 8 to our Consolidated Financial Statements for further discussion.

Repossessed assets are comprised of any property ("other real estate" or "ORE") or other asset acquired through loan restructurings, foreclosure proceedings, or acceptance of a deed-in-lieu of foreclosure. Repossessed assets are carried at the lower of cost or fair value, less estimated selling costs. Fair value is determined through current appraisals or, for taxi medallions, recent observable market transfer prices. Fair value adjustments are reported through a valuation allowance against the asset. During the years ended December 31, 2018, 2017 and 2016, we recorded negative fair value adjustments of $20.3 million, $15.0 million, and 2.7 million, respectively, on repossessed assets. The increase in fair value adjustments for the year ended December 31, 2018 is primarily due to the increase in repossessed taxi medallions coupled with a further decline in collateral value. In conjunction with the repossession of $17.9 million and $31.7 million in additional taxi medallions during the years ended December 31, 2018 and 2017, respectively, we recorded charge-offs to the ALLL totaling zero and $665,000, respectively. See the Asset Quality section within Management's Discussion and Analysis for additional information regarding repossessed assets in aggregate, including repossession activity.

**Other Fair Value Disclosures**

The preparation of financial statements in accordance with U.S. GAAP requires disclosure of the fair value of financial assets and liabilities, including those items that are not measured and reported at fair value on a recurring or non-recurring basis. The methodologies for estimating the fair value of financial assets and liabilities that are measured at fair value on a recurring or non-recurring basis are discussed above. The methodologies for estimating the fair value of other items, which are carried on the Consolidated Statements of Financial Condition at cost or amortized cost, are discussed below.

Fair value estimates for our financial instruments are made at a specific point in time, based on relevant market information and information about the financial instrument. Fair value estimates are not necessarily representative of our total enterprise value.

The carrying amounts for cash and cash equivalents are reasonable estimates of fair value.

Federal Home Loan Bank stock, which is required as part of membership, has no trading market and is redeemable at par. Accordingly, its fair value is presented at the redemption (par) value.

Our loans held for sale consist of the government-guaranteed portion of SBA-loans. The fair value of our loans held for sale approximates cost, as these loans have adjustable rates and are backed by the full faith and credit of the U.S. Government.

The estimated fair value of our loans and leases, net, is based on the discounted value of contractual cash flows using interest rates that approximate those offered for loans with similar maturities and collateral requirements to borrowers of comparable credit worthiness. Other factors, such as credit risk and liquidity risk are incorporated in the fair value measurement.

Deposits are mostly non-interest-bearing or NOW and money market deposits that bear floating interest rates that are re-priced based on market considerations and the Bank's strategy. Therefore, the carrying value approximates fair value. The carrying and fair values do not include the intangible fair value of core deposit relationships, which comprise a significant portion of our deposit base. Management believes that the Bank's core deposit relationships represent a relatively stable, low-cost source of funding that has a substantial intangible value separate from the deposit balances. Time deposits, 92.5% of which mature within one year, had a carrying value and estimated fair value of $1.85 billion at December 31, 2018. The estimated fair value is based on the discounted value of contractual cash flows using interest rates that approximated those offered for time deposits with similar maturities and terms.

The estimated fair value of our borrowings is based on the discounted value of contractual cash flows using interest rates that approximate those offered for borrowings with similar maturities and collateral requirements. The estimated fair value of our subordinated debt is based on a quoted market price.

The following table summarizes the carrying amounts and estimated fair values of our financial assets and liabilities:

| | | Estimated Fair Value Measurements | | | |
|---|---|---|---|---|---|
| *(in thousands)* | Carrying Amount | Total | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| **December 31, 2018** | | | | | |
| **FINANCIAL ASSETS** | | | | | |
| Cash and cash equivalents | $ 317,255 | 317,255 | 317,255 | - | - |
| Securities available-for-sale | 7,301,604 | 7,301,604 | 32,894 | 7,085,460 | 183,250 |
| Securities held-to-maturity | 1,883,533 | 1,845,198 | - | 1,845,198 | - |
| Federal Home Loan Bank stock (1) | 264,877 | 264,877 | - | 264,877 | - |
| Loans held for sale | 485,305 | 485,305 | - | 485,305 | - |
| Loans and leases, net (2) | 36,193,122 | 35,648,161 | - | - | 35,648,161 |
| Equity securites (3) | 21,043 | 21,043 | - | 21,043 | - |
| Derivatives | 3,629 | 3,629 | - | 3,629 | - |
| Total financial assets | $ 46,470,368 | 45,887,072 | 350,149 | 9,705,512 | 35,831,411 |
| **FINANCIAL LIABILITIES** | | | | | |
| Deposits (4) | 36,378,773 | 36,372,925 | - | 36,372,925 | - |
| Federal Home Loan Bank borrowings | 4,970,000 | 4,962,203 | - | 4,962,203 | - |
| Broker repurchase agreements | 150,000 | 150,294 | - | 150,294 | - |
| Federal funds purchased | 670,000 | 670,000 | 670,000 | - | - |
| Subordinated debt | 258,174 | 252,436 | - | 252,436 | - |
| Derivatives | 1,038 | 1,038 | - | 985 | 53 |
| Total financial liabilities | $ 42,427,985 | 42,408,896 | 670,000 | 41,738,843 | 53 |
| **December 31, 2017** | | | | | |
| **FINANCIAL ASSETS** | | | | | |
| Cash and cash equivalents | $ 335,466 | 335,466 | 335,466 | - | - |
| Securities available-for-sale | 6,953,719 | 6,953,719 | 24,726 | 6,774,503 | 154,490 |
| Securities held-to-maturity | 1,996,376 | 1,983,087 | - | 1,983,087 | - |
| Federal Home Loan Bank stock (1) | 227,920 | 227,920 | - | 227,920 | - |
| Loans held for sale | 432,277 | 432,277 | - | 432,277 | - |
| Loans and leases, net (2) | 32,416,580 | 32,406,977 | - | - | 32,406,977 |
| Derivatives | 2,373 | 2,373 | - | 2,373 | - |
| Total financial assets | $ 42,364,711 | 42,341,819 | 360,192 | 9,420,160 | 32,561,467 |
| **FINANCIAL LIABILITIES** | | | | | |
| Deposits (4) | $ 33,439,827 | 33,435,263 | - | 33,435,263 | - |
| Federal Home Loan Bank borrowings | 4,195,000 | 4,185,541 | - | 4,185,541 | - |
| Broker repurchase agreements | 75,000 | 75,179 | - | 75,179 | - |
| Federal funds purchased | 715,000 | 715,000 | 715,000 | - | - |
| Subordinated debt | 257,381 | 267,924 | - | 267,924 | - |
| Derivatives | 2,700 | 2,700 | - | 2,673 | 27 |
| Total financial liabilities | $ 38,684,908 | 38,681,607 | 715,000 | 37,966,580 | 27 |

(1) FHLB stock has no trading market and is redeemable at par. As such, fair value is presented at the redemption (par) value.

(2) The estimated fair value measurements for loans and leases include adjustments related to market interest rates, and other factors such as credit risk and liquidity risk.

(3) Equity securities primarily represent Community Reinvestment Act ("CRA") qualifying closed-end bond fund investments. Effective January 1, 2018, we adopted ASU 2016-01 (*Amendments to Financial Instruments- Recognition and Measurement of Financial Assets*). Accordingly, we reclassified CRA securities from the available-for-sale category to other assets.

(4) The carrying and fair values of deposits do not include the intangible fair value of core deposit relationships.

## (4) Securities

We generally invest in U.S. Government agency obligations, securities guaranteed by U.S. Government-sponsored enterprises, and other investment grade securities. The fair value of these investments fluctuates based on several factors, including general interest rate changes. For collateralized mortgage obligations and certain other debt securities, fair value fluctuates based on credit quality, changes in credit spreads, and the degree of market liquidity, among other factors.

The following table summarizes the components of our securities portfolios as of the dates indicated:

| | December 31, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | | | | 2017 | | | |
| (in thousands) | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| **AVAILABLE-FOR-SALE** | | | | | | | | |
| U.S. Treasury securities | $ 32,954 | 66 | (126) | 32,894 | 24,831 | - | (105) | 24,726 |
| Residential mortgage-backed securities: | | | | | | | | |
| U.S. Government Agency | 44,196 | 317 | (806) | 43,707 | 32,260 | 376 | (354) | 32,282 |
| Government-sponsored enterprises | 1,558,689 | 1,876 | (47,271) | 1,513,294 | 1,505,352 | 7,351 | (17,813) | 1,494,890 |
| Collateralized mortgage obligations: | | | | | | | | |
| U.S. Government Agency | 244,772 | 470 | (5,899) | 239,343 | 249,906 | 920 | (5,102) | 245,724 |
| Government-sponsored enterprises | 3,984,361 | 8,368 | (103,112) | 3,889,617 | 3,787,233 | 7,334 | (80,792) | 3,713,775 |
| Private | 478,399 | 1,081 | (9,348) | 470,132 | 401,343 | 1,213 | (2,872) | 399,684 |
| Securities of U.S. states and political subdivisions: | | | | | | | | |
| Municipal Bond - Taxable | 6,692 | - | (138) | 6,554 | 7,506 | 44 | - | 7,550 |
| Other debt securities: | | | | | | | | |
| Commercial mortgage-backed securities | 111,409 | 157 | (1,578) | 109,988 | 127,791 | 949 | (527) | 128,213 |
| Single issuer trust preferred & corporate debt securities | 450,305 | 1,136 | (7,117) | 444,324 | 398,157 | 4,492 | (1,826) | 400,823 |
| Pooled trust preferred securities | 20,675 | 1,859 | (1,606) | 20,928 | 21,159 | 491 | (3,294) | 18,356 |
| Other | 554,354 | 695 | (24,226) | 530,823 | 474,691 | 1,053 | (9,108) | 466,636 |
| Equity securities (1) | - | - | - | - | 22,243 | - | (1,183) | 21,060 |
| Total available-for-sale | $ 7,486,806 | 16,025 | (201,227) | 7,301,604 | 7,052,472 | 24,223 | (122,976) | 6,953,719 |
| **HELD-TO-MATURITY** | | | | | | | | |
| Residential mortgage-backed securities: | | | | | | | | |
| U.S. Government Agency | $ 35,566 | 26 | (1,168) | 34,424 | 43,322 | 61 | (186) | 43,197 |
| Government-sponsored enterprises | 335,969 | 219 | (10,276) | 325,912 | 378,149 | 2,802 | (4,381) | 376,570 |
| Collateralized mortgage obligations: | | | | | | | | |
| U.S. Government Agency | 178,851 | 91 | (5,803) | 173,139 | 207,027 | 480 | (3,876) | 203,631 |
| Government-sponsored enterprises | 1,264,876 | 4,947 | (27,890) | 1,241,933 | 1,297,857 | 6,981 | (19,963) | 1,284,875 |
| Private | 2,437 | 16 | - | 2,453 | 2,985 | 17 | - | 3,002 |
| Other debt securities: | | | | | | | | |
| Commercial mortgage-backed securities | 17,570 | 21 | (49) | 17,542 | 17,916 | 290 | - | 18,206 |
| Single issuer trust preferred & corporate debt securities | 48,257 | 1,705 | (174) | 49,788 | 48,529 | 4,451 | - | 52,980 |
| Other | 7 | - | - | 7 | 591 | 35 | - | 626 |
| Total held-to-maturity | $ 1,883,533 | 7,025 | (45,360) | 1,845,198 | 1,996,376 | 15,117 | (28,406) | 1,983,087 |

(1) Equity securities represent Community Reinvestment Act ("CRA") qualifying closed-end bond fund investments. Effective January 1, 2018, we adopted ASU 2016-01 (*Amendments to Financial Instruments- Recognition and Measurement of Financial Assets*). Accordingly, we reclassified CRA securities from the available-for-sale category to other assets.

On December 10, 2013, federal regulators issued a final rule implementing the "Volcker Rule" enacted as part of the Dodd-Frank Act. The Volcker Rule prohibits banking organizations and their affiliates from investing in and sponsoring certain types of funds, including a range of asset securitization structures, that do not meet the exemptive criteria for continued ownership (defined as "Covered Funds"). The Federal Reserve previously exercised its authority to extend the divestiture period for such pre-2014 investments to July 21, 2017. The Bank divested its limited holdings of certain AFS securities in investment vehicles that met the definition of Covered Funds either by the divestiture deadline in July 2017 or shortly thereafter with the exception of one private CMO re-REMIC security which was written off in the first quarter of 2018, leaving the Bank zero exposure to Covered Funds securities since that time.

We use securities as collateral for debtor-in-possession deposit accounts in excess of FDIC insurance limits, clients' treasury tax and loan deposits, public deposits, securities sold under agreements to repurchase and borrowings from the Federal Home Loan Bank of New York. As of December 31, 2018, the Bank did not have any securities pledged with FHLB. However, the carrying value of securities held by FHLB as custodian totaled $2.93 billion. These securities were not pledged and can be used to pledge towards future borrowings, as necessary. As of December 31, 2017, the Bank pledged $1.08 billion of securities with FHLB while the total carrying value of securities held by FHLB as custodian was $2.24 billion.

During the years ended December 31, 2018, 2017 and 2016, we recognized other-than-temporary impairment losses on debt securities as summarized in the tables below. We do not intend to sell the securities for which we have recognized temporary impairment losses, and it is not more likely than not that we will be required to sell the securities prior to recovery.

| *(in thousands)* | Number of Securities | | Total Other-than-temporary Impairment Losses | Less: Noncredit Portion Recognized in OCI | Net Impairment Losses Recognized in Earnings (1) |
|---|---|---|---|---|---|
| **December 31, 2018** | | | | | |
| **AVAILABLE-FOR-SALE** | | | | | |
| Collateralized mortgage obligations | 2 | $ | (2) | (14) | (16) |
| Total other-than-temporarily impaired securities | 2 | $ | (2) | (14) | (16) |
| **December 31, 2017** | | | | | |
| **AVAILABLE-FOR-SALE** | | | | | |
| Collateralized debt obligations | 1 | $ | (517) | - | (517) |
| Pooled trust preferred securities | 6 | | (137) | 21 | (116) |
| Total other-than-temporarily impaired securities | 7 | $ | (654) | 21 | (633) |
| **December 31, 2016** | | | | | |
| **AVAILABLE-FOR-SALE** | | | | | |
| Collateralized debt obligations | 1 | $ | (54) | - | (54) |
| Pooled trust preferred securities | 9 | | (932) | 559 | (373) |
| Total other-than-temporarily impaired securities | 10 | $ | (986) | 559 | (427) |

(1) The year ended December 31, 2018 includes losses on a CMO security that meets the defintion of Covered Funds under the Volcker Rule totaling $1,000. The year ended December 31, 2017 includes losses on CDOs and CMOs that meet the definition of Covered Funds under the Volcker Rule totaling $517,000 and $13,000, respectively. The year ended December 31, 2016 includes losses on CDOs and CMOs that meet the definition of Covered Funds under the Volcker Rule totaling $54,000 and $27,000, respectively.

The following table presents a roll forward of activity related to the credit component of other-than-temporary impairments recognized in pre-tax earnings on debt securities held at period-end for which a portion of the impairment was recognized in other comprehensive income (loss) at period-end:

*(in thousands)*

| | | |
|---|---|---|
| **Year ended December 31, 2018** | | |
| Cumulative credit component of other-than-temporary impairment losses at beginning of period | $ | 13,032 |
| Additions for the credit component on debt securities for which other-than-temporary impairment was not previously recognized | | 15 |
| Additions for the credit component on debt securities for which other-than-temporary impairment was previously recognized | | 1 |
| Reduction for realized losses on debt securities sold, matured, and other | | (413) |
| Cumulative credit component of other-than-temporary impairment losses at end of period (1) | $ | 12,635 |
| **Year ended December 31, 2017** | | |
| Cumulative credit component of other-than-temporary impairment losses at beginning of period | $ | 27,982 |
| Additions for the credit component on debt securities for which other-than-temporary impairment was not previously recognized | | - |
| Additions for the credit component on debt securities for which other-than-temporary impairment was previously recognized | | 633 |
| Reduction for realized losses on debt securities sold, matured, and other | | (15,583) |
| Cumulative credit component of other-than-temporary impairment losses at end of period (2) | $ | 13,032 |
| **Year ended December 31, 2016** | | |
| Cumulative credit component of other-than-temporary impairment losses at beginning of period | $ | 29,970 |
| Additions for the credit component on debt securities for which other-than-temporary impairment was not previously recognized | | 3 |
| Additions for the credit component on debt securities for which other-than-temporary impairment was previously recognized | | 424 |
| Reduction for realized losses on debt securities sold, matured, and other | | (2,415) |
| Cumulative credit component of other-than-temporary impairment losses at end of period (3) | $ | 27,982 |

(1) The cumulative credit component of other-than-temporary losses at December 31, 2018 includes $1,000 of losses on securities that meet the definition of Covered Funds under the Volcker Rule.

(2) The cumulative credit component of other-than-temporary losses at December 31, 2017 includes $3,000 of losses on securities that meet the definition of Covered Funds under the Volcker Rule.

(3) The cumulative credit component of other-than-temporary losses at December 31, 2016 includes $13.8 million of losses on securities that meet the definition of Covered Funds under the Volcker Rule.

When estimating the portion of other-than-temporary impairment loss attributable to credit, we use a discounted cash flow model that considers credit enhancement and structural protection. The estimation of cash flow incorporates numerous assumptions including default rates, severity estimates, recovery rates, prepayment speeds and structural enhancement characteristics. Assumptions will vary based upon the specific underlying characteristics and collateral profiles of the underlying securities. Specifically, assumptions are determined based upon collateral vintage, borrower characteristics, geographical data and payment performance. Market data and third-party inputs are utilized to validate assumptions. Subsequent assessments may result in additional estimated credit losses on previously impaired securities. These additional estimated credit losses are recorded as reclassifications from the portion of other-than-temporary impairment previously recognized in other

comprehensive income (loss) to earnings in the period of such assessments. In our review of CMOs for other-than-temporary impairment, we evaluated the collateral performance and structural credit enhancement assumptions, along with other market considerations, for each security. In our review of bank-collateralized pooled trust preferred securities for other-than-temporary impairment, we considered various annual default scenarios. Additionally, the collateral was reviewed to determine if additional bank issuers should be assumed to be an immediate default or would cure (resume paying interest) based on Fitch credit scoring, ratio of non-performing assets to tangible common equity and loan loss reserves, capital levels, and FDIC quarterly trends. Based on this review, we assumed that certain bank issuers on our watch list will default and others will cure in the future. Utilizing our assumptions, we then discounted the cash flows to assess the amount of credit loss.

The following tables present information regarding AFS securities, categorized by type of security and length of time that individual securities have been in a continuous unrealized loss position at the dates indicated. Unrealized losses on other-than-temporarily impaired securities include noncredit impairments recorded in other comprehensive income (loss).

| | *Less than 12 months* | | *12 months or longer* | | *Total* | |
|---|---|---|---|---|---|---|
| *(in thousands)* | **Fair Value** | **Unrealized Losses** | **Fair Value** | **Unrealized Losses** | **Fair Value** | **Unrealized Losses** |
| **December 31, 2018** | | | | | | |
| Temporarily-impaired securities | | | | | | |
| U.S. Treasury securities | $ 4,963 | (8) | 12,875 | (118) | 17,838 | (126) |
| Residential mortgage-backed securities: | | | | | | |
| U.S. Government Agency | 5,563 | (26) | 20,363 | (780) | 25,926 | (806) |
| Government-sponsored enterprises | 320,131 | (3,315) | 1,061,233 | (43,956) | 1,381,364 | (47,271) |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 48,944 | (421) | 149,795 | (5,478) | 198,739 | (5,899) |
| Government-sponsored enterprises | 240,140 | (1,161) | 2,808,972 | (101,414) | 3,049,112 | (102,575) |
| Private | 70,387 | (820) | 296,985 | (8,206) | 367,372 | (9,026) |
| Securities of U.S. states and political subdivisions: | | | | | | |
| Municipal Bond - Taxable | - | - | 6,554 | (138) | 6,554 | (138) |
| Other debt securities: | | | | | | |
| Commercial mortgage-backed securities | 19,700 | (53) | 74,532 | (1,525) | 94,232 | (1,578) |
| Single issuer trust preferred & corporate debt securities | 198,691 | (1,686) | 163,619 | (5,431) | 362,310 | (7,117) |
| Pooled trust preferred securities | - | - | 3,678 | (653) | 3,678 | (653) |
| Other | 358,753 | (1,635) | 156,121 | (22,588) | 514,874 | (24,223) |
| Total temporarily-impaired securities | 1,267,272 | (9,125) | 4,754,727 | (190,287) | 6,021,999 | (199,412) |
| Other-than-temporarily impaired securities | | | | | | |
| Collateralized mortgage obligations: | | | | | | |
| Government-sponsored enterprises | - | - | 506 | (537) | 506 | (537) |
| Private | 1,143 | (72) | 5,948 | (250) | 7,091 | (322) |
| Other debt securities: | | | | | | |
| Pooled trust preferred securities | - | - | 275 | (953) | 275 | (953) |
| Other | 4,166 | (3) | - | - | 4,166 | (3) |
| Total other-than-temporarily impaired securities | 5,309 | (75) | 6,729 | (1,740) | 12,038 | (1,815) |
| Total temporarily-impaired and other-than-temporarily impaired securities | $ 1,272,581 | (9,200) | 4,761,456 | (192,027) | 6,034,037 | (201,227) |

| (in thousands) | Less than 12 months | | 12 months or longer | | Total | |
|---|---|---|---|---|---|---|
| | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| **December 31, 2017** | | | | | | |
| Temporarily-impaired securities | | | | | | |
| U.S. Treasury securities | $ 23,730 | (102) | 996 | (3) | 24,726 | (105) |
| Residential mortgage-backed securities: | | | | | | |
| U.S. Government Agency | 19,053 | (210) | 3,224 | (144) | 22,277 | (354) |
| Government-sponsored enterprises | 512,169 | (4,369) | 537,447 | (13,444) | 1,049,616 | (17,813) |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 79,591 | (1,186) | 77,200 | (3,916) | 156,791 | (5,102) |
| Government-sponsored enterprises | 1,463,939 | (18,013) | 1,658,095 | (61,923) | 3,122,034 | (79,936) |
| Private | 136,929 | (781) | 101,843 | (1,658) | 238,772 | (2,439) |
| Other debt securities: | | | | | | |
| Commercial mortgage-backed securities | 20,533 | (59) | 26,985 | (468) | 47,518 | (527) |
| Single issuer trust preferred & corporate debt securities | 40,355 | (201) | 115,954 | (1,625) | 156,309 | (1,826) |
| Pooled trust preferred securities | - | - | 3,958 | (1,673) | 3,958 | (1,673) |
| Other | 290,086 | (315) | 135,031 | (8,793) | 425,117 | (9,108) |
| Equity securities (1) | - | - | 21,059 | (1,183) | 21,059 | (1,183) |
| Total temporarily-impaired securities | 2,586,385 | (25,236) | 2,681,792 | (94,830) | 5,268,177 | (120,066) |
| Other-than-temporarily impaired securities | | | | | | |
| Collateralized mortgage obligations: | | | | | | |
| Government-sponsored enterprises | - | - | 584 | (856) | 584 | (856) |
| Private | 1,783 | (37) | 13,430 | (396) | 15,213 | (433) |
| Other debt securities: | | | | | | |
| Pooled trust preferred securities | - | - | 3,672 | (1,621) | 3,672 | (1,621) |
| Total other-than-temporarily impaired securities | 1,783 | (37) | 17,686 | (2,873) | 19,469 | (2,910) |
| Total temporarily-impaired and other-than-temporarily impaired securities | $ 2,588,168 | (25,273) | 2,699,478 | (97,703) | 5,287,646 | (122,976) |

(1) Equity securities represent Community Reinvestment Act ("CRA") qualifying closed-end bond fund investments. Effective January 1, 2018, we adopted ASU 2016-01 (Amendments to Financial Instruments- Recognition and Measurement of Financial Assets). Accordingly, we reclassified CRA securities from the available-for-sale category to other assets.

The following table presents information regarding HTM securities, categorized by type of security and length of time that individual securities have been in a continuous unrealized loss position at the dates indicated. Unrealized losses on other-than-temporarily impaired securities include noncredit impairments recorded in other comprehensive income (loss).

| | *Less than 12 months* | | *12 months or longer* | | *Total* | |
|---|---|---|---|---|---|---|
| *(in thousands)* | **Fair Value** | **Unrealized Losses** | **Fair Value** | **Unrealized Losses** | **Fair Value** | **Unrealized Losses** |
| **December 31, 2018** | | | | | | |
| Temporarily-impaired securities | | | | | | |
| Mortgage-backed securities: | | | | | | |
| U.S. Government Agency | $ - | - | 33,537 | (1,168) | 33,537 | (1,168) |
| Government-sponsored enterprises | 44,768 | (378) | 262,930 | (9,898) | 307,698 | (10,276) |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 12,974 | (213) | 151,590 | (5,590) | 164,564 | (5,803) |
| Government-sponsored enterprises | 35,926 | (386) | 903,283 | (27,504) | 939,209 | (27,890) |
| Other debt securities: | | | | | | |
| Commercial mortgage-backed securities | 10,126 | (49) | - | - | 10,126 | (49) |
| Single issuer trust preferred & corporate debt securities | 10,719 | (174) | - | - | 10,719 | (174) |
| Total temporarily-impaired and other-than-temporarily impaired securities | $ 114,513 | (1,200) | 1,351,340 | (44,160) | 1,465,853 | (45,360) |
| **December 31, 2017** | | | | | | |
| Temporarily-impaired securities | | | | | | |
| Mortgage-backed securities: | | | | | | |
| U.S. Government Agency | $ - | - | 2,984 | (186) | 2,984 | (186) |
| Government-sponsored enterprises | 32,163 | (146) | 144,750 | (4,235) | 176,913 | (4,381) |
| Collateralized mortgage obligations: | | | | | | |
| U.S. Government Agency | 48,242 | (515) | 84,940 | (3,361) | 133,182 | (3,876) |
| Government-sponsored enterprises | 491,071 | (6,282) | 354,927 | (13,681) | 845,998 | (19,963) |
| Total temporarily-impaired securities | 571,476 | (6,943) | 587,601 | (21,463) | 1,159,077 | (28,406) |
| Total temporarily-impaired and other-than-temporarily impaired securities | $ 571,476 | (6,943) | 587,601 | (21,463) | 1,159,077 | (28,406) |

The unrealized losses in our securities portfolio are primarily due to an increase in the federal funds target and higher prevailing interest rates due to favorable economic growth.

Deterioration in general market conditions could have a negative effect on the projected cash flows and ultimate recoverability of our securities. If a security is deemed to be other-than-temporarily impaired, we are required to write down the security to fair value. Losses on securities that become other-than-temporarily impaired (where we do not intend to sell the security and it is not more likely than not that we will be required to sell before recovery of the security's amortized cost) are bifurcated with the credit portion of the loss recognized in earnings and the noncredit loss portion of the impairment recognized in other comprehensive income (loss), net of tax.

Our private CMOs and other debt securities are the securities in our portfolio that are the most exposed to impairment losses. In performing our other-than-temporary impairment analysis for these securities, we estimated future cash flows for each security based upon our best estimate of future delinquencies, estimated defaults, loss severity, and prepayments. We reviewed the estimated cash flows to determine whether we expect to receive all originally scheduled cash flows. Projected credit losses were compared to the current level of credit enhancement to assess whether the security is expected to incur losses in any future period and therefore would be deemed other-than-temporarily impaired as of December 31, 2018.

The contractual maturities of investments in AFS and HTM debt securities are summarized in the following table. Expected maturities will differ from contractual maturities since borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

| | December 31, 2018 | | |
|---|---|---|---|
| *(in thousands)* | | **Amortized Cost** | **Fair Value** |
| **AVAILABLE-FOR-SALE** | | | |
| Due in one year or less | $ | 557,562 | 533,387 |
| Due after one year through five years | | 308,714 | 307,218 |
| Due after five years through ten years | | 280,756 | 273,893 |
| Due after ten years | | 6,339,774 | 6,187,106 |
| Total available-for-sale debt securities | $ | 7,486,806 | 7,301,604 |
| **HELD-TO-MATURITY** | | | |
| Due in one year or less | $ | 10,184 | 10,135 |
| Due after one year through five years | | 24,914 | 24,938 |
| Due after five years through ten years | | 68,612 | 68,735 |
| Due after ten years | | 1,779,823 | 1,741,390 |
| Total held-to-maturity debt securities | $ | 1,883,533 | 1,845,198 |

## (5) Federal Home Loan Bank Stock

As a member of the Federal Home Loan Bank ("FHLB") of New York, Signature Bank is required to maintain a specified minimum investment in the FHLB's Class B capital stock. The minimum stock investment requirement is the sum of the membership stock purchase requirement, determined on an annual basis at the end of each calendar year, and the activity-based stock purchase requirement, determined on a daily basis.

At December 31, 2018 and 2017, Signature Bank was in compliance with the FHLB's minimum investment requirement with stock investments of $264.9 million and $227.9 million, respectively, carried at cost on the Consolidated Statements of Financial Condition. Collateral pledged for outstanding FHLB borrowings at December 31, 2018 and 2017 included $223.7 million and $188.8 million of FHLB capital stock, respectively.

In performing our other-than-temporary impairment analysis of FHLB stock, we evaluated, among other things, (i) the FHLB's earnings performance, including the significance of any decline in net assets of the FHLB as compared to the regulatory capital amount of the FHLB, (ii) the commitment by the FHLB to make dividend payments, and (iii) the liquidity position of the FHLB. We do not consider this security to be other-than-temporarily impaired at December 31, 2018.

## (6) Loans Held for Sale

Loans held for sale at December 31, 2018 and 2017 were $485.3 million and $432.3 million, respectively. Gains on sales associated with the securitization of pooled loans and sale of mortgage loans for the years ended December 31, 2018, 2017 and 2016 amounted to $4.9 million, $6.8 million and $5.1 million, respectively.

We are an active participant in the SBA loan and SBA pool secondary market by purchasing, securitizing, and selling the guaranteed portions of SBA loans. Most SBA loans have adjustable rates and float at a spread over prime and reset monthly or quarterly. The guaranteed portions of SBA loans are backed by the full faith and credit of the U.S. Government and therefore carry a 0% risk weight for regulatory capital purposes.

We warehouse loans for generally up to 180 days until there are sufficient loans with similar characteristics to securitize the pool. We may strip excess servicing from loans with different coupons to create a pool at a common rate. This process results in the creation of two assets: a par pool, which is sold to accredited investors, and an interest-only strip, which we retain as an available-for-sale security. In certain transactions, the Bank may also

decide to hold a portion of the pooled security in our available-for-sale portfolio. The interest-only strip represents the portion of the coupon stripped from a loan.

## (7) Loans and Leases, Net

The following table summarizes our loan portfolio as of the dates indicated:

| *(in thousands)* | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Mortgage loans: | | |
| Multi-family residential property | $ 15,688,481 | 14,512,051 |
| Commercial property | 10,309,837 | 8,902,027 |
| 1-4 family residential property | 620,486 | 621,377 |
| Home equity lines of credit | 116,272 | 133,268 |
| Acquistion, development and construction loans | 1,656,467 | 2,018,901 |
| Total mortgage loans | 28,391,543 | 26,187,624 |
| Other loans: | | |
| Other commercial and industrial | 7,905,488 | 6,070,217 |
| Taxi medallions | 88,511 | 309,894 |
| Consumer | 9,038 | 15,310 |
| Total other loans | 8,003,037 | 6,395,421 |
| Net deferred fees and costs | 28,547 | 29,494 |
| ALLL | (230,005) | (195,959) |
| Net loans | $ 36,193,122 | 32,416,580 |

As of December 31, 2018 and 2017, commercial and industrial loans include overdrafts of commercial deposit accounts totaling $47.9 million and $53.8 million, respectively, and other consumer loans include overdrafts of personal deposit accounts totaling $4.0 million and $9.5 million, respectively.

In order to manage credit quality, we view the Bank's loan portfolio by various segments and classes of loans. For commercial loans, we assign individual credit ratings ranging from 1 (lowest risk) to 9 (highest risk) as an indicator of credit quality ("credit-rated commercial loans"). These ratings are based on specific risk factors including (i) historical and projected financial results of the borrower, (ii) market conditions of the borrower's industry that may affect the borrower's future financial performance, (iii) business experience of the borrower's management, (iv) nature of the underlying collateral, if any, and (v) history of the borrower's payment performance. Non-rated loans generally include commercial loans with outstanding principal balances below $100,000, overdrafts, residential mortgages, and consumer loans.

The following table summarizes our portfolio of commercial loans by credit rating as of the dates indicated:

| (in thousands) | *Pass* Rating 1-6 | *Special Mention* Rating 7 | *Substandard* Rating 8 | *Doubtful* Rating 9 | Non-rated | Total |
|---|---|---|---|---|---|---|
| **December 31, 2018** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Multi-family residential property | $ 15,479,307 | 122,528 | 85,963 | - | - | 15,687,798 |
| Commercial property | 10,183,214 | 100,504 | 26,119 | - | - | 10,309,837 |
| 1-4 family residential property | 524,786 | - | 5,502 | - | - | 530,288 |
| Acquistion, development and construction loans | 1,554,468 | 90,438 | 11,561 | - | - | 1,656,467 |
| Commercial and industrial loans: | | | | | | |
| Taxi medallions | - | - | 88,511 | - | - | 88,511 |
| Other commercial and industrial | 7,710,089 | 97,115 | 42,935 | - | 55,349 | 7,905,488 |
| Total commercial loans | $ 35,451,864 | 410,585 | 260,591 | - | 55,349 | 36,178,389 |
| **December 31, 2017** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Multi-family residential property | $ 14,402,185 | 109,866 | - | - | - | 14,512,051 |
| Commercial property | 8,850,017 | 20,246 | 31,764 | - | - | 8,902,027 |
| 1-4 family residential property | 510,381 | 6,036 | - | - | - | 516,417 |
| Acquistion, development and construction loans | 1,851,333 | 136,168 | 31,400 | - | - | 2,018,901 |
| Commercial and industrial loans: | | | | | | |
| Taxi medallions | - | - | 309,894 | - | - | 309,894 |
| Other commercial and industrial | 5,873,181 | 90,594 | 46,045 | 32 | 60,365 | 6,070,217 |
| Total commercial loans | $ 31,487,097 | 362,910 | 419,103 | 32 | 60,365 | 32,329,507 |

For consumer loans, including residential mortgages and home equity lines of credit, we consider the borrower's payment history and current payment performance as leading indicators of credit quality. Effective January 2016, we no longer originate personal residential mortgages and home equity lines of credit, though we continue to service the existing portfolios. A consumer loan is considered nonperforming generally when it becomes 90 days delinquent based on contractual terms, at which time the accrual of interest income is discontinued. In the case of residential mortgages and home equity lines of credit, exceptions may be made if the loan has sufficient collateral value, based on a current appraisal, and is in process of collection.

The following table summarizes our portfolio of consumer loans by performance status as of the dates indicated:

| *(in thousands)* | | Performing | Nonperforming | Total |
|---|---|---|---|---|
| **December 31, 2018** | | | | |
| Residential mortgages | $ | 87,848 | 3,033 | 90,881 |
| Home equity lines of credit | | 112,799 | 3,473 | 116,272 |
| Other consumer loans | | 9,038 | - | 9,038 |
| Total consumer loans | $ | 209,685 | 6,506 | 216,191 |
| **December 31, 2017** | | | | |
| Residential mortgages | $ | 103,825 | 1,135 | 104,960 |
| Home equity lines of credit | | 129,376 | 3,892 | 133,268 |
| Other consumer loans | | 15,310 | - | 15,310 |
| Total consumer loans | $ | 248,511 | 5,027 | 253,538 |

Loans to related parties include loans to directors and their related companies and our executive officers that are made in the ordinary course of business. Related party loans totaled $1.4 million and $26.7 million at December 31, 2018 and 2017, respectively, and all related party loans are current as to payments.

The following table summarizes the delinquency and accrual status of our loan portfolio, excluding loans held for sale, as of the dates indicated:

| (in thousands) | | Past Due 30-89 Days | Past Due 90+ Days | Total Past Due | Current | Total Loans | Loans Past Due 90+ Days & Accruing | Non-accruing Loans |
|---|---|---|---|---|---|---|---|---|
| **December 31, 2018** | | | | | | | | |
| Commercial loans | | | | | | | | |
| Loans secured by real estate: | | | | | | | | |
| Multi-family residential property | $ | 12,294 | 5,000 | 17,294 | 15,670,504 | 15,687,798 | 5,000 | - |
| Commercial property | | 6,569 | - | 6,569 | 10,303,268 | 10,309,837 | - | - |
| 1-4 family residential property | | 8,381 | 1,800 | 10,181 | 520,107 | 530,288 | - | 1,800 |
| Acquistion, development and construction loans | | 827 | - | 827 | 1,655,640 | 1,656,467 | - | - |
| Commercial and industrial loans: | | | | | | | | |
| Taxi medallion loans | | 7,997 | 31,130 | 39,127 | 49,384 | 88,511 | - | 88,511 |
| Other commercial and industrial loans | | 34,323 | 9,384 | 43,707 | 7,861,781 | 7,905,488 | 2,530 | 11,835 |
| Consumer loans | | | | | | | | |
| Residential mortgages | | 856 | 2,268 | 3,124 | 87,757 | 90,881 | 303 | 3,033 |
| Home equity lines of credit | | 246 | 3,473 | 3,719 | 112,553 | 116,272 | - | 3,473 |
| Consumer loans | | 854 | - | 854 | 8,184 | 9,038 | - | - |
| Total | $ | 72,347 | 53,055 | 125,402 | 36,269,178 | 36,394,580 | 7,833 | 108,652 |
| **December 31, 2017** | | | | | | | | |
| Commercial loans | | | | | | | | |
| Loans secured by real estate: | | | | | | | | |
| Multi-family residential property | $ | 7,167 | - | 7,167 | 14,504,884 | 14,512,051 | - | - |
| Commercial property | | 753 | 559 | 1,312 | 8,900,715 | 8,902,027 | 559 | - |
| 1-4 family residential property | | - | 1,800 | 1,800 | 514,617 | 516,417 | 1,800 | - |
| Acquistion, development and construction loans | | - | - | - | 2,018,901 | 2,018,901 | - | - |
| Commercial and industrial loans: | | | | | | | | |
| Taxi medallion loans | | 31,308 | 138,936 | 170,244 | 139,650 | 309,894 | - | 309,894 |
| Other commercial and industrial loans | | 35,205 | 9,510 | 44,715 | 6,025,502 | 6,070,217 | 3,316 | 11,997 |
| Consumer loans | | | | | | | | |
| Residential mortgages | | 157 | 1,163 | 1,320 | 103,640 | 104,960 | 656 | 1,135 |
| Home equity lines of credit | | 899 | 3,892 | 4,791 | 128,477 | 133,268 | - | 3,892 |
| Consumer loans | | 736 | - | 736 | 14,574 | 15,310 | - | - |
| Total | $ | 76,225 | 155,860 | 232,085 | 32,350,960 | 32,583,045 | 6,331 | 326,918 |

Nonaccrual loans at December 31, 2018 and December 31, 2017 totaled $108.7 million and $326.9 million, respectively. At December 31, 2018, $88.5 million of nonaccrual loans were secured by taxi medallions. The decrease in nonaccrual loans was primarily attributable to a $70.4 million write-down of New York City taxi medallion loans as a result of further significant declines in the underlying taxi medallions' collateral fair value that occurred in the first quarter of 2018, as well as a $10.9 million write-down of Chicago taxi medallion loans due to a decline in fair value. The collateral value declines impact the entire taxi medallion portfolio as all related loans remain on nonaccrual. These nonaccrual loans are accounted for using the cost recovery method and, as such, all interest and principal payments received are applied to each loan's principal balance until the cost is recovered. As a result, further contributing to this decrease is $66.9 million of full pay-offs and principal and interest payments applied to the principal balance of taxi medallion nonaccrual loans. Our current strategy to hold the remaining taxi medallion portfolio until maturity remains unchanged.

The reduction is also attributable to the repossession of $73.6 million in taxi medallion loans during the year, including the reclassification of $10.1 million of nonaccrual loans in conjunction with the adoption of ASU 2014-09, *Revenue from Contracts with Customers*, during the first quarter. See Note 2(t) for additional information regarding the adoption of ASU 2014-09.

The aggregate decrease was partially offset by the addition of 24 commercial and industrial loan relationships totaling $8.6 million and four loans secured by 1-4 family residential property totaling $3.8 million, as well as a return to accrual status of five loans totaling $2.7 million (two home equity lines of credit and three commercial and industrial loans).

There were no commitments at December 31, 2018 to lend additional funds on nonaccrual loans. For further discussion, see Note 8 to our Consolidated Financial Statements.

At December 31, 2018, loans past due 90 days or more and still accruing included one commercial real estate loan totaling $5.0 million and six commercial and industrial loans totaling $2.0 million that are well secured and in process of collection. At December 31, 2017, loans past due 90 days or more and still accruing included 14 commercial and industrial loans totaling $3.3 million, four loans secured by 1-4 family residential property totaling $2.3 million, and one commercial real estate loan for $559,000 that are well secured and in process of collection.

As of December 31, 2018 and 2017, the Bank held residential consumer mortgage loans in the process of foreclosure totaling $5.0 million and $8.2 million, respectively. The Bank did not hold any foreclosed residential real estate at December 31, 2018 or 2017. Other repossessed assets as of December 31, 2018 and 2017 totaled $51.6 million and $28.8 million, respectively. The December 31, 2018 repossessed asset balance principally consists of taxi medallions. While the repossessed asset balance has increased, $27.4 million have been legally sold and financed by the Bank. However, in accordance with the new revenue recognition standard, due to uncertainty regarding collectability, these repossessed assets cannot be derecognized. See the Asset Quality section within Management's Discussion and Analysis for additional information regarding repossessed assets, including related activity during the period.

As of December 31, 2018 and 2017, the Bank had pledged $7.75 billion and $6.25 billion, respectively, of commercial real estate loans through a blanket assignment to secure borrowings from the Federal Home Loan Bank ("FHLB") to meet collateral requirements of $4.91 billion and $3.95 billion, respectively, on FHLB borrowings.

Commercial loans (including commercial and industrial loans and loans to commercial borrowers that are secured by real estate) constitute a substantial portion of our loan portfolio. Substantially all of the real estate collateral for the loans in our portfolio is located within the New York metropolitan area. As a result, our financial condition and results of operations may be affected by changes in the economy and the real estate market of the New York metropolitan area. A prolonged period of economic recession or other adverse economic conditions in the New York metropolitan area may result in an increase in nonpayment of loans, a decrease in collateral value, and an increase in our ALLL.

## (8) Allowance for Loan and Lease Losses

The table below presents a summary by loan portfolio segment of our ALLL, loan loss experience, and provision for loan and lease losses for the periods indicated:

| | | Credit-rated loans (1) | | | Non-rated loans | | | |
|---|---|---|---|---|---|---|---|---|
| *(in thousands)* | | Commercial Real Estate | 1-4 Family Residential Property | Commercial & Industrial | Commercial | Residential Mortgages | Consumer | Total |
| **For the year ended December 31, 2018** | | | | | | | | |
| Beginning balance - ALLL | $ | 151,680 | 1,521 | 38,285 | 1,553 | 2,784 | 136 | 195,959 |
| Provision | | 24,469 | 1,013 | 136,311 | (113) | 744 | 100 | 162,524 |
| Charge-offs | | (518) | - | (139,805) | (797) | (641) | (206) | (141,967) |
| Recoveries | | - | - | 12,822 | 552 | 38 | 77 | 13,489 |
| Ending balance - ALLL | $ | 175,631 | 2,534 | 47,613 | 1,195 | 2,925 | 107 | 230,005 |
| **For the year ended December 31, 2017** | | | | | | | | |
| Beginning balance - ALLL | $ | 114,581 | 627 | 92,220 | 1,227 | 4,643 | 197 | 213,495 |
| Provision | | 37,225 | 894 | 225,585 | 901 | (1,364) | 56 | 263,297 |
| Charge-offs | | (166) | - | (282,434) | (1,148) | (571) | (218) | (284,537) |
| Recoveries | | 40 | - | 2,914 | 573 | 76 | 101 | 3,704 |
| Ending balance - ALLL | $ | 151,680 | 1,521 | 38,285 | 1,553 | 2,784 | 136 | 195,959 |
| **For the year ended December 31, 2016** | | | | | | | | |
| Beginning balance - ALLL | $ | 128,672 | 1,657 | 56,069 | 1,458 | 6,826 | 341 | 195,023 |
| Provision | | (14,222) | (999) | 173,080 | (2) | (2,053) | (30) | 155,774 |
| Charge-offs | | (170) | (91) | (141,720) | (1,041) | (151) | (195) | (143,368) |
| Recoveries | | 301 | 60 | 4,791 | 812 | 21 | 81 | 6,066 |
| Ending balance - ALLL | $ | 114,581 | 627 | 92,220 | 1,227 | 4,643 | 197 | 213,495 |

(1) For the year ended December 31, 2017 and 2016, the beginning balance of the ALLL and provision lines both include reclassifications of immaterial amounts amongst all categories of credit-rated loans related to Acqusition, Development and Construction loans. See Note 1 for further details.

The reduction in the charge-off and provision levels for the year ended December 31, 2018, compared to the same period a year ago, is due to the decrease in the comparative taxi medallion value decline in each period. The

decline in the taxi medallion value in the second quarter of 2017 was more significant than the first quarter of 2018. The increase in charge-off and provision levels for the year ended December 31, 2017 compared to the same period in 2016 principally relates to the New York City (NYC) taxi medallion portfolio, partially offset by the absence of the 2016 charge-off and provision activity related to the Chicago taxi medallion portfolio.

Over the last three years, the NYC and Chicago taxi medallion markets had been distressed and the underlying collateral values had declined as a result of elevated risk premiums and the absence of new financing. However, in Chicago, since the third quarter of 2017 transfer volumes have been consistent with historical levels and transfer values are relatively stable. Therefore, the Bank has been exclusively utilizing observable public transfer data to measure the related fair value of the underlying Chicago taxi medallions.

In NYC, during the first quarter of 2018, numerous transactions were noted ranging from approximately $120,000 to $400,000, and both revenues and observable market transfers declined significantly. Because the declines over a short period were substantial, and based on other trends within the market providing additional evidence of market illiquidity and deterioration at that time, management felt it necessary to reassess its model inputs and assumptions. Following that review, most notably, management recalibrated its discount rate and growth rate assumptions within its discounted cash flow model and began to weight cash sales more heavily when evaluating observable transfers. Also reflected in the updated assumptions in the first quarter of 2018 were failed auction activity and a significant increase in medallion supply due to anticipated credit union sales and/or auctions in the first quarter of 2018. Both transfer prices and the discounted cash flow model valuation output were weighted to derive an estimated fair value of $160,000, net of selling costs, which represented a significant decline from the December 31, 2017 value.

Since then, the NYC Taxi & Limousine Commission (TLC) trip data has shown stabilization in revenue per medallion, and transfer values have been relatively consistent. Therefore, the associated fair value has also remained stable. In the fourth quarter, TLC trip data again supported stabilization. However, management noted a recent increase and sustained level in observable market transfer volumes, as well as similar trends in our own medallion sales activity. In fact, approximately 40% of the TLC published transfers in the fourth quarter of 2018 are our own cash or financed sales. This represented a significant change from prior quarterly trends. Therefore, in the fourth quarter, management changed its methodology from a weighted cash flow and observable data calculation, to a full weight of observable transfers.

Management placed significant weight on our own transaction prices given transparency into our own deal terms. Pursuant to ASC 820, *Fair Value Measurement,* the transaction prices utilized in the valuation also considered any transaction price adjustments necessary. Non-Signature transfers were also incorporated into the valuation. For non-Signature transactions, since we lack transparency into the deal terms, management determined the need to apply estimated transaction price adjustments for consistency purposes as the presumption is certain term concessions were likely. When considering all transfer levels, the estimated NYC taxi medallion fair value as of December 31, 2018 was $160,000 net of selling costs, which is again consistent with the first quarter of 2018 valuation.

Additionally, for the year ended December 31, 2016, there was a reserve release of $25.7 million in the commercial real estate portfolio allowance due to an update of the portfolio's ALLL general reserve loss factors during the year. Annually, we analyze our ALLL methodology to assess whether updates are necessary based on various considerations including current market conditions, portfolio trends and industry information. Historically, proxy loss factors based on current industry studies were utilized in the commercial real estate portfolio's general reserve calculation. At the time, based on our most recent stress testing results, continued credit metric comparison to our portfolio's history, as well as credit metric comparison to our peers, we used the Bank's own loss history to derive the portfolio's loss factors.

The following table presents our ALLL and outstanding loan balances by loan portfolio segment, based on the methodology followed in determining the allowance:

| | Credit-rated loans | | | Non-rated loans | | | |
|---|---|---|---|---|---|---|---|
| *(in thousands)* | Commercial Real Estate | 1-4 Family Residential Property | Commercial & Industrial | Commercial | Residential Mortgages (1) | Consumer | Total |
| **As of December 31, 2018** | | | | | | | |
| ALLL: | | | | | | | |
| Individually evaluated for impairment | $ 135 | 630 | 5,112 | 5 | 2,333 | - | 8,215 |
| Collectively evaluated for impairment | 175,496 | 1,904 | 42,501 | 1,190 | 592 | 107 | 221,790 |
| Recorded investment in loans: | | | | | | | |
| Individually evaluated for impairment | 13,411 | 5,502 | 137,510 | 9 | 7,508 | - | 163,940 |
| Collectively evaluated for impairment | 27,640,691 | 524,786 | 7,801,140 | 55,340 | 199,645 | 9,038 | 36,230,640 |
| **As of December 31, 2017** | | | | | | | |
| ALLL: | | | | | | | |
| Individually evaluated for impairment | $ - | - | 3,960 | 37 | 2,139 | - | 6,136 |
| Collectively evaluated for impairment | 151,680 | 1,521 | 34,325 | 1,516 | 645 | 136 | 189,823 |
| Recorded investment in loans: | | | | | | | |
| Individually evaluated for impairment | 9,961 | 4,236 | 335,727 | 74 | 5,026 | - | 355,024 |
| Collectively evaluated for impairment | 25,423,018 | 512,181 | 5,984,019 | 60,291 | 233,202 | 15,310 | 32,228,021 |

(1) Includes home equity lines of credit.

A loan is considered impaired when, based on current information and events, it is probable that we will be unable to collect all amounts due in accordance with the original contractual terms of the loan agreement, including scheduled principal and interest payments. In determining whether a loan is impaired, we review the payment performance and we consider a loan to be impaired once it is placed on nonaccrual status. A loan may also be considered impaired if it is past due maturity and is not well-secured and in the process of collection. In addition, if a loan is restructured as troubled debt, we consider the loan impaired during the year of restructuring. In subsequent years, we do not consider the restructured loan as impaired if it was restructured at a market rate and continues to perform in accordance with the modified terms. Other TDRs, however, are reported as such for as long as the loan remains outstanding.

The following table summarizes the recorded investment, unpaid principal balance, and related allowance for our impaired loans as of the dates indicated:

| | December 31, 2018 | | | December 31, 2017 | | |
|---|---|---|---|---|---|---|
| *(in thousands)* | **Unpaid Principal Balance** | **Recorded Investment** | **Related Allowance** | **Unpaid Principal Balance** | **Recorded Investment** | **Related Allowance** |
| **With no related allowance recorded:** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Commercial property | $ 3,512 | 3,512 | - | 9,961 | 9,961 | - |
| Multi-family residential property | 9,628 | 9,628 | - | - | - | - |
| 1-4 family residential property | 3,703 | 3,703 | - | 4,236 | 4,236 | - |
| Commercial and industrial loans | 153,381 | 114,000 | - | 649,801 | 320,938 | - |
| Residential mortgages | 1,498 | 1,498 | - | - | - | - |
| **With an allowance recorded:** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Commercial property | 271 | 271 | 135 | - | - | - |
| 1-4 family residential property | 1,800 | 1,800 | 630 | - | - | - |
| Commercial and industrial loans | 114,987 | 23,519 | 5,117 | 15,350 | 14,863 | 3,997 |
| Residential mortgages | 1,743 | 1,534 | 767 | 1,790 | 1,134 | 582 |
| Home equity lines of credit | 3,723 | 4,475 | 1,566 | 3,905 | 3,892 | 1,557 |
| **Total:** | | | | | | |
| Commercial loans secured by real estate | 18,914 | 18,914 | 765 | 14,197 | 14,197 | - |
| Commercial and industrial loans | 268,368 | 137,519 | 5,117 | 665,151 | 335,801 | 3,997 |
| Residential mortgages | 3,241 | 3,032 | 767 | 1,790 | 1,134 | 582 |
| Home equity lines of credit | 3,723 | 4,475 | 1,566 | 3,905 | 3,892 | 1,557 |
| Total impaired loans | $ 294,246 | 163,940 | 8,215 | 685,043 | 355,024 | 6,136 |

The following table summarizes the average recorded investment of impaired loans and interest income recognized on impaired loans for the periods indicated:

| | Years ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2018 | | 2017 | | 2016 | |
| (in thousands) | Average Recorded Investment | Interest Income Recognized | Average Recorded Investment | Interest Income Recognized | Average Recorded Investment | Interest Income Recognized |
| **With no related allowance recorded:** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Commercial property | $ 4,825 | 49 | 7,680 | 235 | 4,464 | 192 |
| Multi-family residential property | 1,926 | 1 | - | - | - | - |
| 1-4 family residential property | 3,916 | 70 | 3,746 | 187 | - | - |
| Commercial and industrial loans | 175,039 | 299 | 198,518 | 234 | 83,147 | 2,712 |
| Residential mortgages | 599 | - | - | - | - | - |
| **With an allowance recorded:** | | | | | | |
| Commercial loans secured by real estate: | | | | | | |
| Commercial property | 234 | - | - | - | 4,434 | 130 |
| Acquistion, development and construction loans | 100 | - | - | - | - | - |
| Multi-family residential property | - | - | 623 | - | 3,113 | 107 |
| 1-4 family residential property | 1,454 | - | 33 | - | 860 | - |
| Commercial and industrial loans | 18,889 | 73 | 157,455 | 1,260 | 164,158 | 3,899 |
| Residential mortgages | 1,610 | - | 1,994 | - | 2,827 | 24 |
| Home equity lines of credit | 4,314 | 43 | 4,690 | - | 5,488 | - |
| Other consumer loans | - | - | 1 | - | 7 | - |
| **Total:** | | | | | | |
| Commercial loans secured by real estate | 12,455 | 120 | 12,082 | 422 | 12,871 | 429 |
| Commercial and industrial loans | 193,928 | 372 | 355,973 | 1,494 | 247,305 | 6,611 |
| Residential mortgages | 2,209 | - | 1,994 | - | 2,827 | 24 |
| Home equity lines of credit | 4,314 | 43 | 4,690 | - | 5,488 | - |
| Other consumer loans | - | - | 1 | - | 7 | - |
| Total | $ 212,906 | 535 | 374,740 | 1,916 | 268,498 | 7,064 |

For economic reasons and to maximize the recovery of loans, we may work with borrowers experiencing financial difficulties, and will consider modifications to a borrower's existing loan terms and conditions that we would not otherwise consider, commonly referred to troubled debt restructuring loans ("TDRs"). Our TDRs consist of those loans where we modify the contractual terms of the loan, such as (i) a deferral of the loan's principal amortization through either interest-only or reduced principal payments, (ii) a reduction in the loan's contractual interest rate, (iii) principal forgiveness or (iv) an extension of the loan's contractual term.

The following table presents loans that were classified as TDRs during the years ended December 31, 2018, 2017, and 2016. The pre-modification balances represent the recorded investment immediately prior to modification, and the post-modification balances represent the recorded investment as of the dates indicated:

| | December 31, 2018 | | | December 31, 2017 | | | December 31, 2016 | | |
|---|---|---|---|---|---|---|---|---|---|
| (dollars in thousands) | Number of Loans | Pre-Modification Balance | Post-Modification Balance | Number of Loans | Pre-Modification Balance | Post-Modification Balance | Number of Loans | Pre-Modification Balance | Post-Modification Balance |
| Commercial loans secured by real estate: | | | | | | | | | |
| Commercial property | - | $ - | - | 1 | 6,372 | 6,372 | - | - | - |
| Multi-family residential property | 1 | 9,644 | 9,628 | - | - | - | - | - | - |
| 1-4 family residential property | - | - | - | 1 | 4,450 | 4,236 | - | - | - |
| Commercial and industrial loans: | | | | | | | | | |
| Commercial and industrial | 22 | 36,229 | 33,882 | 7 | 11,504 | 3,845 | 19 | 18,591 | 16,526 |
| Taxi medallions | 94 | 21,371 | 14,728 | 409 | 212,068 | 133,853 | 91 | 61,834 | 53,718 |
| Consumer loans: | | | | | | | | | |
| Home equity lines of credit | 1 | 1,029 | 1,002 | 2 | 1,231 | 373 | 1 | 962 | 940 |
| Total | 118 | $ 68,273 | 59,240 | 420 | 235,625 | 148,679 | 111 | 81,387 | 71,184 |

The following table summarizes how the TDRs loans recorded for the years ended December 2018, 2017, and 2016 were modified:

| *(in thousands)* | | Term Extension | Term Extension with Other Concession (1) | Deferred Principal Amortization | Deferred Principal Amortization with Other Concession (1) | Rate Reduction | Total |
|---|---|---|---|---|---|---|---|
| **December 31, 2018** | | | | | | | |
| Commercial loans secured by real estate: | | | | | | | |
| Multi-family residential property | $ | 9,628 | - | - | - | - | 9,628 |
| Commercial and industrial loans: | | | | | | | |
| Commercial and industrial | | 21,161 | 4,599 | - | 8,122 | - | 33,882 |
| Taxi medallions | | - | 14,728 | - | - | - | 14,728 |
| Consumer loans: | | | | | | | |
| Home equity lines of credit | | - | - | - | 1,002 | - | 1,002 |
| Total | $ | 30,789 | 19,327 | - | 9,124 | - | 59,240 |
| **December 31, 2017** | | | | | | | |
| Commercial loans secured by real estate: | | | | | | | |
| Commercial property | $ | - | - | 6,372 | - | - | 6,372 |
| 1-4 family residential property | | 4,236 | - | - | - | - | 4,236 |
| Commercial and industrial loans: | | | | | | | |
| Commercial and industrial | | 3,845 | - | - | - | - | 3,845 |
| Taxi medallions | | - | 133,853 | - | - | - | 133,853 |
| Consumer loans: | | | | | | | |
| Home equity lines of credit | | - | - | - | 373 | - | 373 |
| Total | $ | 8,081 | 133,853 | 6,372 | 373 | - | 148,679 |
| **December 31, 2016** | | | | | | | |
| Commercial and industrial loans: | | | | | | | |
| Commercial and industrial | $ | 1,863 | - | 2,609 | 12,054 | - | 16,526 |
| Taxi medallions | | - | - | 14,455 | 30,335 | 8,928 | 53,718 |
| Consumer loans: | | | | | | | |
| Residential mortgages | | 940 | - | - | - | - | 940 |
| Total | $ | 2,803 | - | 17,064 | 42,389 | 8,928 | 71,184 |

(1) Other concessions may include a reduction of the loan's interest rate, principal forgiveness and/or a term extension.

Our impaired loans at December 31, 2018 and 2017 include TDRs totaling $134.2 million and $220.3 million, respectively. The decrease in TDRs was primarily driven by taxi medallion charge-offs of $49.9 million as a result of further significant declines in the underlying collateral fair value in the first quarter of 2018, the foreclosure of taxi medallion loans totaling $30.4 million, taxi medallion loan payoffs totaling $35.0 million, continued payment reductions for existing TDRs totaling $13.7 million, and other loan portfolio TDR payoffs of $11.8 million. This was partially offset by the restructure of 94 taxi medallion loans totaling $14.7 million, 22 other commercial and industrial loans totaling $33.9 million, one commercial real estate loan totaling $9.6 million, and one home equity line of credit totaling $1.0 million.

During the year of restructuring, we consider a TDR impaired. In subsequent years, we do not consider the restructured loan impaired if it was restructured at a market rate and continues to perform in accordance with its modified terms. Other TDRs, however, are reported as such for as long as the loan remains outstanding. For all loans classified as a TDR, we record an impairment loss, if any, based on the present value of expected future cash flows discounted at the original loan's effective interest rate, or, if the loan is collateral dependent, based on the fair value of the collateral less estimated costs to sell, if appropriate.

As of December 31, 2018, we had three taxi medallion relationships and loans totaling $320,000 that were modified as a TDR within the previous 12 months that subsequently defaulted on payments. As of December 31, 2017, we had 88 taxi medallion relationships and loans totaling $29.1 million that were modified as a TDR within the previous 12 months that subsequently defaulted on payments.

For the years ended December 31, 2018, 2017 and 2016, we recorded interest income on impaired loans during the period of impairment totaling $535,000, $1.9 million and $7.1 million, respectively. If all impaired loans had been performing in accordance with their original terms, we would have recorded interest income, with respect to such loans, of approximately $8.2 million, $8.7 million, and $8.3 million for the years ended December 31, 2018, 2017 and 2016, respectively. Average impaired loans for the years ended December 31, 2018, 2017 and 2016 totaled $212.9 million, $374.7 million, and $268.5 million, respectively.

## (9) Premises and Equipment

Premises and equipment are summarized as follows as of the dates indicated:

| *(in thousands)* | | December 31, 2018 | 2017 |
|---|---|---|---|
| Leasehold improvements | $ | 75,122 | 74,147 |
| Furniture, fixtures and equipment | | 79,025 | 68,513 |
| | | 154,147 | 142,660 |
| Less accumulated depreciation and amortization | | (95,096) | (81,089) |
| Premises and equipment, net | $ | 59,051 | 61,571 |

Depreciation and amortization expense totaled $14.0 million, $12.2 million and $10.1 million for the years ended December 31, 2018, 2017 and 2016, respectively.

## (10) Deposits

The types of deposits are summarized as follows as of the dates indicated:

| *(in thousands)* | | December 31, 2018 | 2017 |
|---|---|---|---|
| Non-interest-bearing demand | $ | 12,015,841 | 11,308,414 |
| NOW and interest-bearing demand | | 4,395,550 | 3,655,699 |
| Money market | | 17,841,281 | 16,675,707 |
| Time deposits | | 1,377,517 | 956,418 |
| Brokered deposits (1) | | 748,584 | 843,589 |
| Total deposits | $ | 36,378,773 | 33,439,827 |

(1) Includes non-interest bearing deposits of $26,000 and $44.6 million as of December 31, 2018 and December 31, 2017, respectively.

The aggregate amounts of time deposits including brokered time deposits in denominations of $100,000 or more at December 31, 2018 and 2017 were $1.91 billion and $1.48 billion, respectively. Time deposit accounts with balances of $250,000 or more totaled $1.41 billion and $886.3 million at December 31, 2018 and 2017, respectively.

At December 31, 2018, the scheduled maturities of time deposits are as follows:

| *(in thousands)* | | **Amount** |
|---|---|---|
| 2019 | $ | 1,847,544 |
| 2020 | | 96,062 |
| 2021 | | 30,418 |
| 2022 | | 15,925 |
| 2023 | | 7,445 |
| Total time deposits (1) | $ | 1,997,394 |

(1) Includes brokered time deposits of $619.8 million.

At December 31, 2018 and 2017, we had approximately $49.7 million and $53.8 million, respectively, in deposits held by our directors and their related interests.

## (11) Incentive Savings Plan

We have a 401(k) program under which employees may make personal contributions by means of payroll deductions of up to 60% of all eligible pre-tax earnings or the maximum allowable under income tax regulations. Participants age 50 and over are permitted to make an additional "catch-up" contribution each year, subject to limits set by the Internal Revenue Service. We match 100% of the first 3% of base compensation a participant contributes to the plan and 50% of the next 4% of base compensation contributed. The sum of the employer contributions and employee contributions are also limited by income tax regulations. Our contributions, included in salaries and benefits expense, were $6.0 million, $5.4 million and $5.3 million, respectively, for the years ended December 31, 2018, 2017 and 2016.

## (12) Federal Funds Purchased and Securities Sold Under Agreements to Repurchase

The following is a summary of federal funds purchased and securities sold under agreements to repurchase with brokers at or for the years ended:

| | *December 31,* | | | |
|---|---|---|---|---|
| *(dollars in thousands)* | | **2018** | | **2017** |
| **Federal Funds Purchased** | | | | |
| Year-end balance | $ | 670,000 | $ | 715,000 |
| Maximum amount outstanding at any month-end | $ | 708,000 | $ | 715,000 |
| Average outstanding balance | $ | 521,318 | $ | 335,317 |
| Weighted-average interest rate paid | | 2.07% | | 1.16% |
| Weighted-average interest rate at year-end | | 2.59% | | 1.58% |
| **Securities Sold Under Agreements to Repurchase** | | | | |
| Year-end balance | $ | 150,000 | $ | 75,000 |
| Maximum amount outstanding at any month-end | $ | 150,000 | $ | 350,000 |
| Average outstanding balance | $ | 97,534 | $ | 228,342 |
| Weighted-average interest rate paid | | 2.77% | | 2.54% |
| Weighted-average interest rate at year-end | | 2.93% | | 2.34% |

During the years ended December 31, 2018, 2017, and 2016, we recorded interest expense on federal funds

purchased and securities sold under agreements to repurchase with brokers totaling $13.5 million, $9.70 million, and $11.9 million, respectively.

The federal funds purchased at December 31, 2018 were overnight transactions. As of December 31, 2018, we had repurchase agreements with brokers accounted for as secured borrowings totaling $150.0 million, among which, $100.0 million is expected to mature in November 2019 and the remaining $50.0 million is expected to mature in May 2020. As of December 31, 2017, we had repurchase agreements with brokers accounted for as secured borrowings totaling $75.0 million with an expected maturity date of August 2018.

At December 31, 2018, securities with a fair value of $167.4 million and a carrying value of $170.2 million were pledged to meet our collateral requirement of $160.5 million on repurchase agreements with brokers. At December 31, 2017, securities with a fair value of $131.0 million and a carrying value of $131.3 million were pledged to meet our collateral requirement of $80.3 million on repurchase agreements with brokers.

Collateral for these types of transactions typically consists of government agency and government-sponsored enterprise securities. Securities collateralizing these agreements are classified as Securities available-for-sale or Securities held-to-maturity in the Consolidated Statements of Financial Condition. The amount of excess collateral required is governed by each individual contract. The primary risk associated with these repurchase agreements is the requirement to pledge a balance of market value based collateral in excess of the borrowed amount. The excess collateral pledged represents an unsecured exposure to the lending counterparty. As the market value of the collateral changes, additional collateral may need to be pledged. In accordance with our policies, eligible counterparties are defined and monitored to minimize exposure. As of December 31, 2018, all repurchase agreements were collateralized with government-sponsored enterprise securities.

## (13) Federal Home Loan Bank Borrowings

As a member of the Federal Home Loan Bank (“FHLB”) of New York, we are required to acquire and hold shares of capital stock in the FHLB in an amount at least equal to 1% of the aggregate principal amount of our unpaid residential mortgage loans and similar obligations at the beginning of each year, 4.5% of our borrowings from the Federal Home Loan Bank, or 0.3% of assets, whichever is greater. As of December 31, 2018, we were in compliance with this requirement.

As of December 31, 2018 and 2017, our FHLB borrowings only include advances. While historically we have also had securities sold under repurchase agreements with FHLB, we had no such agreement outstanding as of December 31, 2018 and 2017.

The following table provides a summary of FHLB borrowings at or for the years ended:

| | *December 31,* | |
|---|---|---|
| *(dollars in thousands)* | **2018** | **2017** |
| **FHLB Advances** | | |
| Year-end balance | $ 4,970,000 | $ 4,195,000 |
| Maximum amount outstanding at any month-end | $ 5,270,000 | $ 4,195,000 |
| Average outstanding balance | $ 4,455,001 | $ 2,560,791 |
| Weighted-average interest rate paid | 2.08% | 1.40% |
| Weighted-average interest rate at year-end | 2.51% | 1.65% |

During the years ended December 31, 2018, 2017, and 2016, interest expense recorded on FHLB borrowings totaled $92.6 million, $36.5 million, and $24.6 million, respectively.

As of December 31, 2018, $7.75 billion of commercial real estate loans pledged through a blanket assignment were available to meet collateral requirements of approximately $4.91 billion on FHLB borrowings. As of December 31, 2017, securities with a fair value of $1.07 billion and carrying value of $1.08 billion, and $6.25 billion of commercial real estate loans pledged through a blanket assignment, were available to meet collateral requirements of approximately $3.95 billion on FHLB borrowings.

FHLB advances as of December 31, 2018 have contractual maturities as follows:

| *(in thousands)* | | Amount |
|---|---|---|
| 2019 | $ | 3,625,000 |
| 2020 | | 1,215,000 |
| 2021 | | 80,000 |
| 2022 | | 21,000 |
| 2023 | | 29,000 |
| Total FHLB advances | $ | 4,970,000 |

At December 31, 2018, there are no long-term FHLB advances that are callable by the FHLB for redemption prior to their maturity date.

## (14) Subordinated Debt

On April 19, 2016, the Bank issued $260.0 million aggregate principal amount of Variable Rate Subordinated Notes due April 19, 2026 (the "Notes") to institutional investors. The Notes accrue interest at a fixed rate of 5.30% for the first five years until April 2021. After this date and for the remaining five years of the Notes' term, interest will accrue at a variable rate of LIBOR plus 3.92%. Additionally, during the variable interest rate period and at the Bank's option, the Notes can be prepaid by the Bank. Net proceeds from this offering were used for general corporate purposes and to facilitate our continued growth.

Subordinated debt is reported in the Consolidated Statements of Financial Condition net of deferred issuance costs of $1.8 million.

## (15) Income Taxes

### Provision for Income Taxes

The following table presents the components of income tax expense for the periods indicated:

| | | Years ended December 31, | | |
|---|---|---|---|---|
| *(in thousands)* | | 2018 | 2017 | 2016 |
| **Income tax expense (benefit) reported in net income:** | | | | |
| **Federal** | | | | |
| Current expense | $ | 107,978 | 127,813 | 186,213 |
| Deferred income tax expense (benefit) | | (8,468) | 40,307 | 7,328 |
| Total federal | $ | 99,510 | 168,120 | 193,541 |
| **State and local** | | | | |
| Current expense | $ | 58,764 | 2,115 | 66,198 |
| Deferred income tax expense | | 9,847 | 17,820 | 1,384 |
| Total state and local | $ | 68,611 | 19,935 | 67,582 |
| **Total** | | | | |
| Current expense | $ | 166,742 | 129,928 | 252,411 |
| Deferred income tax expense | | 1,379 | 58,127 | 8,712 |
| Total income tax expense reported in net income | $ | 168,121 | 188,055 | 261,123 |
| **Income tax expense (benefit) reported in stockholders' equity:** | | | | |
| Unrealized gains (losses) on securities | $ | (25,146) | (8,341) | (32,035) |
| Unrealized losses on cash flow hedges | | (974) | - | - |
| Total income tax expense reported in stockholders' equity | $ | (26,120) | (8,341) | (32,035) |
| Total income taxes | $ | 142,001 | 179,714 | 229,088 |

**Deferred Tax Assets and Liabilities**

The following table presents the significant components of our net deferred tax asset (liability) as of the dates indicated:

| *(in thousands)* | *December 31,* 2018 | 2017 |
|---|---|---|
| **DEFERRED TAX ASSETS** | | |
| Allowance for loan and lease losses | $ 67,977 | 56,587 |
| Income on leased assets | 82,204 | 57,253 |
| Unearned compensation - restricted stock | 11,583 | 10,917 |
| Repossessed taxi medallion valuation reserve | 10,843 | 4,519 |
| Write-down for other-than-temporary impairment of securities | 3,734 | 3,763 |
| Depreciation - ordinary | 2,439 | 17 |
| Other | 4,466 | 3,086 |
| Total deferred tax assets recognized in earnings | 183,246 | 136,142 |
| Net unrealized losses on securities available-for-sale | 44,022 | 29,275 |
| Net unrealized losses on securities transferred to held-to-maturity | 2,512 | 5,440 |
| Total deferred tax assets | 229,780 | 170,857 |
| **DEFERRED TAX LIABILITIES** | | |
| Depreciation - leased assets | 207,593 | 136,581 |
| Prepaid expenses | 818 | 755 |
| Deferred income | - | 23,967 |
| Other | 11,939 | 11,535 |
| Total deferred tax liabilities | 220,350 | 172,838 |
| Net deferred tax asset (liability) | $ 9,430 | (1,981) |

At December 31, 2018, after considering all available positive and negative evidence, management concluded that a valuation allowance for deferred tax assets was not necessary because it is more likely than not that these tax benefits will be fully realized. While we continue to monitor the need for a valuation allowance prospectively, we do not expect a valuation allowance will be required based upon projected profitability and taxable income in the carry-back period. Net deferred tax assets are included in Other assets in our Consolidated Statements of Financial Condition.

**Effective Tax Rate**

The following table presents a reconciliation of statutory federal income tax expense to the Bank's combined effective income tax expense for the periods indicated:

| | *Years ended December 31,* | | | | | |
|---|---|---|---|---|---|---|
| | *2018* | | *2017* | | *2016* | |
| *(dollars in thousands)* | **Expense (Benefit)** | **Rate** | **Expense (Benefit)** | **Rate** | **Expense (Benefit)** | **Rate** |
| Statutory federal income tax expense | $ 141,427 | 21% | 201,342 | 35% | 230,107 | 35% |
| State and local income taxes, net of federal income tax benefit | 52,590 | 8% | 29,503 | 5% | 43,928 | 7% |
| Deduction limitation for FDIC premiums | 4,959 | 1% | - | * | - | * |
| Nondeductible compensation | 3,514 | * | 370 | * | 331 | * |
| Low income housing federal tax credits | (32,621) | (5%) | (17,259) | (3%) | (12,622) | (2%) |
| Stock based compensation | (2,373) | * | (5,491) | (1%) | - | * |
| Tax exempt income | (2,503) | * | (2,586) | * | (1,470) | * |
| 2015 & 2016 NYC affordable housing tax benefit | - | * | (15,070) | (3%) | - | * |
| Federal excise tax on deferred income | - | * | 2,815 | * | - | * |
| Federal tax reform impact on OCI | - | * | 14,101 | 2% | - | * |
| DTA Remeasurement - Federal tax reform | - | * | (18,874) | (3%) | - | * |
| Other items, net | 3,128 | * | (796) | * | 849 | * |
| Effective income tax expense | $ 168,121 | 25% | 188,055 | 32% | 261,123 | 40% |

* - Less than 1%.

**Unrecognized Tax Benefits**

We recognized immaterial liabilities for unrecognized tax benefits related to uncertain tax positions as of December 31, 2018. Our policy is to recognize interest and penalties on income taxes in income tax expense. We file U.S. federal and various state and local income tax returns. For our federal and most state and local income tax returns, we remain subject to examination for tax years 2015 and after.

## (16) Equity Incentive Plan

We have an equity incentive plan designed to assist us in attracting, retaining, and motivating officers, employees, directors, and/or consultants and to provide us and our subsidiaries and affiliates with incentives directly related to increases in our shareholder value. Activity related to the equity incentive plan for the years ended December 31, 2018 and 2017 is summarized as follows:

| | *Years ended December 31,* | |
|---|---|---|
| | **2018** | **2017** |
| Shares available for future awards at beginning of the year | 1,558,973 | 1,763,026 |
| Restricted stock | | |
| Granted | (443,167) | (433,067) |
| Forfeited | 55,137 | 70,096 |
| Shares sold to cover minimum tax withholding upon vesting | 147,006 | 157,676 |
| Treasury stock | 366,098 | 1,242 |
| Shares available for future awards at end of the year | 1,684,047 | 1,558,973 |

**Restricted Stock**

The following table summarizes information regarding outstanding grants of restricted stock for the years ended December 31, 2018 and 2017:

| | *Years ended December 31,* | | | |
|---|---|---|---|---|
| | *2018* | | *2017* | |
| | **Shares** | **Weighted Average Grant Price** | **Shares** | **Weighted Average Grant Price** |
| Outstanding at beginning of the year | 875,813 | $ 131.28 | 926,123 | $ 113.35 |
| Granted | 443,167 | 141.94 | 433,067 | 144.02 |
| Vested | (430,955) | 118.68 | (413,281) | 106.01 |
| Forfeited | (55,137) | 142.66 | (70,096) | 122.16 |

The driver of the 2018 forfeiture is a Type III modification (improbable-to-probable vesting) of awards related to three employees who will be required to provide consulting services to the Bank as non-employees over a two-year vesting period. Similarly, the 2017 forfeiture is primarily related to the retirement of our Chief Credit Officer, who will also be required to provide consulting services over a two-year period. The related vesting period for the modified award is also two years. The modified awards are presented in the granted line item within the respective tables above.

As of December 31, 2018, our total unrecognized compensation cost related to unvested restricted shares was $76.0 million, which is expected to be recognized over a weighted-average period of 1.80 years. During the years ended December 31, 2018, 2017, and 2016, we recognized compensation expense of $52.6 million, $46.4 million, and $41.7 million, respectively, for restricted shares. The total fair value of restricted shares that vested during the years ended December 31, 2018, 2017 and 2016 were $62.4 million, $59.5 million, and $58.5 million, respectively.

## (17) Accumulated Other Comprehensive Loss

The following table presents information regarding items reclassified out of Accumulated Other Comprehensive Loss ("AOCL") for the years ended December 31, 2018 and 2017:

| | *Years ended December 31,* | | |
|---|---|---|---|
| | 2018 | 2017 | |
| *(in thousands)*<br>**Details About AOCI** | **Amount Reclassified Out of AOCL** | **Amount Reclassified Out of AOCL** | **Affected Line Item in the Consolidated Statement of Income** |
| **Net unrealized gains on AFS securities** | $ 989 | 3,963 | Net gains on sales of securities |
| | (16) | (633) | Net impairment losses on securities recognized in earnings |
| Total reclassifications, before tax | 973 | 3,330 | |
| | (287) | (1,235) | Income tax expense |
| Total reclassifications, net of tax | $ 686 | 2,095 | |
| **Net Unrealized losses on derivatives (cash flow hedges)** | | | |
| Reclassifications, before tax | $ 4 | - | Net losses arising during the period |
| | (1) | - | Income tax expense |
| Total reclassifications, net of tax | $ 3 | - | |

The following table presents changes in AOCL, net of tax, for the years ended December 31, 2018 and 2017:

| *(in thousands)* | | AFS Securities | HTM Securities Transferred from AFS | Cash Flow Hedges | Total |
|---|---|---|---|---|---|
| **For the year ended December 31, 2018** | | | | | |
| Balance at December 31, 2017 | $ | (58,767) | (10,100) | - | (68,867) |
| Opening retained earnings adjustments (1) | | 1,183 | - | - | 1,183 |
| Net change in unrealized gain (loss) | | (75,431) | - | (2,327) | (77,758) |
| Amortization of net unrealized loss on securities transferred to HTM | | - | 1,596 | - | 1,596 |
| Amounts reclassified out of AOCL | | (686) | - | 3 | (683) |
| Net current period other comprehensive income (loss) | | (76,117) | 1,596 | (2,324) | (76,845) |
| Balance at December 31, 2018 | $ | (133,701) | (8,504) | (2,324) | (144,529) |
| **For the year ended December 31, 2017** | | | | | |
| Balance at December 31, 2016 | $ | (42,807) | (11,907) | - | (54,714) |
| Net change in unrealized gain (loss) | | (13,865) | - | - | (13,865) |
| Amortization of net unrealized loss on securities transferred to HTM | | - | 1,807 | - | 1,807 |
| Amounts reclassified out of AOCL | | (2,095) | - | - | (2,095) |
| Net current period other comprehensive income (loss) | | (15,960) | 1,807 | - | (14,153) |
| Balance at December 31, 2017 | $ | (58,767) | (10,100) | - | (68,867) |

(1) Effective January 1, 2018, we adopted changes in accounting for sale of repossessed assets pursuant to ASU 2014-09 (*Amendments to Revenue from Contracts with Customers*) and ASU 2016-01 (*Amendments to Financial Instruments- Recognition and Measurement of Financial Assets*). Accordingly, we recorded a $3.0 million decrease to retained earnings that included a reclassification of $1.2 million of unrealized losses related to equity securities from accumulated other comprehensive loss to retained earnings as a cumulative-effect adjustment.

The related tax effects allocated to debt securities and cash flow hedges in AOCL as of December 31, 2018 and 2017 are as follows:

| *(in thousands)* | | Gross Amount | | Tax Component | | Net of Tax |
|---|---|---|---|---|---|---|
| **December 31, 2018** | | | | | | |
| Unrealized loss on AFS and HTM securites | $ | (215,966) | | (73,761) | | (142,205) |
| Urealized loss on cash flow hedges | | (3,298) | | (974) | | (2,324) |
| Balance at December 31, 2018 | $ | (219,264) | | (74,735) | | (144,529) |
| **December 31, 2017** | | | | | | |
| Unrealized loss on AFS and HTM securites | $ | (117,683) | | (48,816) | | (68,867) |
| Urealized loss on cash flow hedges | | - | | - | | - |
| Balance at December 31, 2017 | $ | (117,683) | $ | (48,816) | $ | (68,867) |

## (18) Earnings Per Share

Basic earnings per common share ("EPS") is computed by dividing income available to common stockholders by the weighted average number of common shares outstanding for the period. Unvested stock awards with non-forfeitable rights to dividends, whether paid or unpaid, are considered participating securities and are included in the calculation of EPS using the two class method whereby net income is allocated between common stock and participating securities. Diluted earnings per common share is computed by dividing income allocated to common stockholders for basic EPS, adjusted for earnings reallocated from participating securities, by the weighted average number of common shares outstanding for the period for the dilutive effect of unvested stock awards using the treasury stock method.

The following table shows the computation of basic and diluted earnings per common and common equivalent share for the years indicated:

| | *Years ended December 31,* | | |
|---|---|---|---|
| *(in thousands, except per share amounts)* | **2018** | **2017** | **2016** |
| Net income | $ 505,342 | 387,209 | 396,324 |
| Less: Dividends paid on and earnings allocated to participating securities | 914 | - | - |
| Earnings applicable to common stock | $ 504,428 | 387,209 | 396,324 |
| Common and common equivalent shares: | | | |
| Weighted average common shares outstanding | 54,406 | 54,001 | 53,406 |
| Weighted average common equivalent shares | 260 | 417 | 405 |
| Weighted average common and common equivalent shares | 54,666 | 54,418 | 53,811 |
| Basic earnings per share | $ 9.27 | 7.17 | 7.42 |
| Diluted earnings per share | $ 9.23 | 7.12 | 7.37 |

For the years ended December 31, 2018, 2017 and 2016, there were no anti-dilutive options or warrants excluded from the computation of diluted earnings per share as their exercise price did not exceed the average market price of the Company's common shares.

## (19) Commitments and Contingent Liabilities

In the normal course of business, we have various outstanding commitments and contingent liabilities that are not reflected in the accompanying Consolidated Financial Statements.

***(a) Lease Commitments***

We have entered into non-cancelable operating lease agreements for premises and equipment with expiration dates through the year 2035. Our premises are used principally for private client offices and administrative operations. Rental expense for our premises for the years ended December 31, 2018, 2017, and 2016 totaled $30.0 million, $27.7 million and $25.1million, respectively.

The required minimum rental payments under the terms of the non-cancelable leases at December 31, 2018 are summarized as follows:

| *(in thousands)* | **Amount** |
|---|---|
| 2019 | $ 25,750 |
| 2020 | 29,788 |
| 2021 | 30,580 |
| 2022 | 30,401 |
| 2023 | 30,246 |
| Thereafter | 179,625 |

***(b) Information Technology Services Contracts***

On May 20, 2016, we entered into a Master Agreement for the Provision of Hardware, Software and/or Services (the “Agreement”) with Fidelity Information Services, Inc. (“Fidelity”). Under the terms of the agreement, Fidelity provides us with hardware, software and account processing services related to our core banking applications. Particularly, Fidelity supplies us with enterprise banking services, core data processing services and managed operations services. Fidelity also provides implementation and training services for the software and hardware provided under the Agreement. We have the right to terminate the Agreement upon a change of control of us, or a failure by Fidelity to meet the terms of the Agreement, subject to certain penalties.

The required payments under the terms of the Agreement, as well as other information technology contracts, at December 31, 2018 are as follows:

| *(in thousands)* | **Amount** |
|---|---|
| 2019 | $ 19,242 |
| | |
| 2020 | 10,539 |
| 2021 | 10,539 |
| 2022 | 759 |
| 2023 | 759 |
| Thereafter | |

***(c) Financial Instruments with Off-Balance Sheet Arrangements***

In the normal course of business, we have various outstanding commitments and contingent liabilities not reflected in the accompanying Consolidated Financial Statements.

We enter into transactions that involve financial instruments with off-balance sheet risks in the ordinary course of business to meet the financing needs of our clients. Such financial instruments include commitments to extend credit, standby letters of credit, and unused balances under confirmed letters of credit, all of which are primarily variable rate. Such instruments involve, to varying degrees, elements of credit and interest rate risk.

Our exposure to credit loss in the event of nonperformance by the other party with regard to financial instruments is represented by the contractual notional amount of those instruments. Financial instrument transactions are subject to our normal credit policies and approvals, financial controls and risk limiting and monitoring procedures. We generally require collateral or other security to support financial instruments with credit risk.

The following table presents a summary of our commitments and contingent liabilities:

| | *December 31,* | |
|---|---|---|
| *(in thousands)* | **2018** | **2017** |
| Unused commitments to extend credit | $3,173,675 | 1,352,032 |
| Financial standby letters of credit | 482,482 | 497,581 |
| Commercial and similar letters of credit | 20,145 | 18,002 |
| Other | 1,254 | 1,559 |
| Total | $3,677,556 | 1,869,174 |

Commitments to extend credit consist of agreements having fixed expiration or other termination clauses and may require payment of a fee. Total commitment amounts may not necessarily represent future cash requirements. We evaluate each client's creditworthiness on a case-by-case basis. Upon the extension of credit, we will obtain collateral, if necessary, based on our credit evaluation of the counterparty. Collateral held varies but may include deposits held in financial institutions, real estate, accounts receivable, property, plant and equipment and inventory. At December 31, 2018 and December 31, 2017, our reserves for losses on unused commitments to extend credit totaled $929,000 and $773,000, respectively, and are included in Accrued expenses and other liabilities in our Consolidated Statements of Financial Condition.

We recognize a liability at the inception of the guarantee that is equivalent to the fee received from the client. This liability is amortized over the term of the guarantee on a straight-line basis. At December 31, 2018 and December 31, 2017, we had deferred revenue for commitment fees paid for the issuance of standby letters of credit of $1.4 million as of both year-end dates.

Standby letters of credit are conditional commitments issued by us to guarantee the performance of our clients' obligations to a third party. Standby letters of credit are primarily used to support clients' business trade transactions and may require payment of a fee. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to clients. We had a reserve for credit losses on standby letters of credit totaling $111,000 and $165,000 at December 31, 2018 and 2017, respectively. We recorded provisions for losses related to standby letters of credit totaling $(54,000), $(34,000) and $64,000 for the years ended December 31, 2018, 2017 and 2016, respectively. During the years ended December 31, 2018 and 2017, there were no charge-offs recorded on standby letters of credit.

At December 31, 2018 and 2017, we had commitments to sell loans totaling $5.5 million and $9.1 million, respectively.

***(d) Litigation***

In the normal course of business, the Bank has been named as a defendant in various legal actions. In the opinion of management, after reviewing such claims with legal counsel, resolution of these matters will not have a material adverse impact on our financial condition, results of operations or liquidity.

## (20) Derivative Instruments and Hedging Activities

The Company enters into derivative financial instruments to manage exposures that arise from business activities that result in the receipt or payment of future known and uncertain cash amounts, the value of which are determined by interest rates. The Company's derivative financial instruments are used to manage differences in the amount, timing, and duration of the Company's known or expected cash receipts and its known or expected cash payments principally related to the Company's floating rate borrowings and fixed-rate loan portfolio.

*Cash Flow Hedges of Interest Rate Risk*

The Company's objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company primarily uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

For derivatives designated and that qualify as cash flow hedges of interest rate risk, the gain or loss on the derivative is recorded in Accumulated other comprehensive income (loss) and subsequently reclassified into interest expense in the same period during which the hedged transaction affects earnings.

During 2018, the Company entered into an interest rate swap with a notional of $250.0 million to hedge the interest rate risk in the cash flows on the hedged forecasted issuance of fixed-rate borrowings. Based on the Company's current plans and intentions, it is probable that the hedged forecasted transitions will occur.

The following table presents the effect of cash flow hedge accounting on Accumulated other comprehensive income (loss) during the years ended December 2018, 2017 and 2016.

| | Years ended December 31, | | |
|---|---|---|---|
| *(in thousands)* | **2018** | **2017** | **2016** |
| Amount of loss reclassified from accumulated other comprehensive loss to interest expense | $ 4 | - | - |
| Amount of gain (loss) recognized in other comprehensive (loss) income | $ (3,302) | - | - |

Gains (losses) included in the Consolidated Statements of Income related to interest rate derivatives designated as cash flow hedges during the year ended December 31, 2018 was $4,000 and zero for the years ended December 31, 2017, and 2016. Amounts reported in Accumulated other comprehensive income (loss) related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate liabilities. The Company estimates that an additional $300,000 will be reclassified as a decrease to interest expense in 2019.

*Fair Value Hedges of Interest Rate Risk*

The Company is exposed to changes in the fair value of certain prepayable fixed-rate assets due to changes in benchmark interest rates. The Company uses interest rate swaps to manage its exposure to changes in fair value on these instruments attributable to changes in the designated benchmark interest rate. Interest rate swaps designated as fair value hedges involve the payment of fixed-rate amounts to a counterparty in exchange for the Company receiving variable-rate payments over the life of the agreements without the exchange of the underlying notional

amount. Gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in Interest income for Loans and leases, net.

During 2018, the Company entered into interest rate swaps with a total notional of $650.0 million to hedge certain fixed-rate commercial real estate loans. For the year, the fixed-rate payment related to the net settlement of these interest rate swaps was in excess of the floating rate received. As such, Interest Income from Loans and leases was reduced by $850,000, net, for the year ended December 31, 2018. Based on the current market expectation for interest rate hikes, the Company expects this impact to ultimately result in an increase to interest income.

As of December 31, 2018, the following amounts were recorded on the balance sheet related to cumulative basis adjustment for fair value hedges. The Company did not have any derivative instruments that were designated as accounting hedges as of December 31, 2017.

| Line Item in the Consolidated Statement of Financial Condition in Which the Hedge Item is included | Carrying Amount of the Hedged Assets | | Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Assets |
|---|---|---|---|
| Loans and leases, net (1) | $ | 645,305 | (4,695) |

(1) These amounts include the amortized cost basis of closed portfolios used to designated hedging relationships in which the hedged item is the last layer expected to be remaining at the end of the hedging relationship. At December 31, 2018, the amortized cost basis of the closed portfolios used in these hedging relationships was $1.78 billion; the cumulative basis adjustments associated with these hedging relationships was $4.7 million; and the amount of the designated hedged items was $645.3 million.

*Non-designated Hedges*

From time to time, the Bank has entered into risk participation agreements with external lenders where they are sharing their risk of default on the interest rate swaps on participated loans. We either pay or receive a fee depending on the participation type. Risk participation agreements are credit derivatives not designated as hedges. Credit derivatives are not speculative and are not used to manage interest rate risk in assets or liabilities. Changes in the fair value in credit derivatives are recognized directly in earnings.

The Bank also executes interest rate swaps with customers to facilitate their respective risk management strategies. These swaps with customers are simultaneously offset by swaps that the Bank executes with a third party, such that the Bank minimizes its net risk exposure resulting from such transactions. As the swaps associated with this program do not meet the strict hedge accounting requirements, changes in the fair value of both the customer swaps and the offsetting swaps are recognized directly in earnings.

The following table presents the fair value of the Company's derivative financial instruments, as well as their classification on the Consolidated Statement of Financial Condition at December 31, 2018 and December 31, 2017 respectively:

| (in thousands) | Fair Values of Derivative Instruments | | | |
|---|---|---|---|---|
| | Asset Derivatives | | Liability Derivatives | |
| | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value |
| **December 31, 2018** | | | | |
| **Derivatives designated as hedging instruments** | | | | |
| Interest Rate Contracts | Other Assets | $ - | Other Liabilities | 105 |
| **Total derivatives designated as hedging instruments** | | $ - | | 105 |
| **Derivatives not designated as hedging instruments** | | | | |
| Interest Rate Contracts | Other Assets | $ 3,517 | Other Liabilities | 855 |
| Other Contracts (1) | Other Assets | 112 | Other Liabilities | 78 |
| **Total derivatives not designated as hedging instruments** | | $ 3,629 | | 933 |
| **December 31, 2017** | | | | |
| **Derivatives designated as hedging instruments** | | | | |
| Interest Rate Contracts | Other Assets | $ - | Other Liabilities | - |
| **Total derivatives designated as hedging instruments** | | $ - | | - |
| **Derivatives not designated as hedging instruments** | | | | |
| Interest Rate Contracts | Other Assets | $ 2,373 | Other Liabilities | 2,500 |
| Other Contracts (1) | Other Assets | - | Other Liabilities | 200 |
| **Total derivatives not designated as hedging instruments** | | $ 2,373 | | 2,700 |

(1) Other contracts include risk participation agreements and foreign exchange contracts.

We centrally clear our derivatives with our third party counterparties through the Chicago Mercantile Exchange ("CME") by posting required initial and variation margins. CME legally characterizes variation margin payments for centrally cleared derivatives as settlements of the derivatives' exposures rather than collateral. As a result, the variation margin payment and the related derivative instruments are considered a single unit of account for accounting and financial reporting purposes. The Bank's clearing agent for interest rate and derivative contracts centrally cleared through the CME settles the variation margin daily with the CME; therefore, those interest rate derivative contracts the Bank clears though the CME are reported at a fair value of approximately zero at December 31, 2018.

The effect of gain or (loss) from derivatives designated as fair value hedges on the Consolidated Statements of Income for the years ended December 31, 2018, 2017 and 2016 were as follows:

| (in thousands) | *Years, ended December 31,* **2018** | **2017** | **2016** |
|---|---|---|---|
| Derivative - interest rate swaps: | | | |
| Interest income | $ (4,746) | - | - |
| Hedged item - loans: | | | |
| Interest income | 4,695 | - | - |
| Net Effect on Interest Income | $ (51) | - | - |

The following table presents the effect of derivatives not designated as hedging instruments on the Consolidated Statements of Income for the years ended December 31, 2018, 2017 and 2016:

| *(in thousands)* | | *Years ended December 31,* **2018** | **2017** | **2016** |
|---|---|---|---|---|
| Derivatives Not Designated as Hedging Instruments under Subtopic 815-20 | Location of Gain or (Loss) Recognized in Income on Derivative | Amount of Gain or (Loss) Recognized in Income on Derivative | | |
| Interest Rate Contracts | Other income / (expense) | $ (17) | (13) | 74 |
| Other Contracts (1) | Other income / (expense) | 182 | 80 | 66 |
| Total | | $ 165 | 67 | 140 |

(1) Other contracts include risk participation agreements and foreign exchange contracts.

## (21) Regulatory Capital

As a New York state-chartered bank, we are subject to various regulatory capital requirements administered by state and federal regulatory agencies. Failure to meet minimum capital requirements can initiate certain mandatory—and possible additional discretionary—actions by regulators that, if undertaken, could have a direct material adverse effect on our financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, we must meet specific capital guidelines that involve quantitative measures of our assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. Our capital amounts and classifications are also subject to qualitative judgments by the regulators about components, risk weightings and other factors.

As of December 31, 2018 and 2017, we met all capital adequacy requirements to which we were subject. Additionally, the most recent notification from the Federal Deposit Insurance Corporation categorized us as well capitalized under the regulatory framework for prompt corrective action. There are no conditions or events since that notification that management believes have changed the Bank's category.

The capital amounts and ratios presented in the following table demonstrate that we were "well capitalized" as of December 31, 2018:

| | *Actual* | | *Required for Capital Adequacy Purposes* | | *Required to be Well Capitalized* | |
|---|---|---|---|---|---|---|
| *(dollars in thousands)* | **Amount** | **Ratio** | **Amount** | **Ratio** | **Amount** | **Ratio** |
| Total capital (to risk-weighted assets) | $ 5,040,828 | 13.41% | 3,006,522 | 8.00% | 3,758,153 | 10.00% |
| Tier 1 capital (to risk-weighted assets) | 4,551,609 | 12.11% | 2,254,892 | 6.00% | 3,006,522 | 8.00% |
| Common equity Tier 1 capital (to risk-weighted assets) | 4,551,609 | 12.11% | 1,691,169 | 4.50% | 2,442,800 | 6.50% |
| Tier 1 leverage capital (to average assets) | 4,551,609 | 9.70% | 1,876,893 | 4.00% | 2,346,116 | 5.00% |

The capital amounts and ratios presented in the following table demonstrate we were "well capitalized" as of December 31, 2017:

| | *Actual* | | *Required for Capital Adequacy Purposes* | | *Required to be Well Capitalized* | |
|---|---|---|---|---|---|---|
| *(dollars in thousands)* | **Amount** | **Ratio** | **Amount** | **Ratio** | **Amount** | **Ratio** |
| Total capital (to risk-weighted assets) | $ 4,553,605 | 13.32% | 2,735,682 | 8.00% | 3,419,603 | 10.00% |
| Tier 1 capital (to risk-weighted assets) | 4,099,327 | 11.99% | 2,051,762 | 6.00% | 2,735,682 | 8.00% |
| Common equity Tier 1 capital (to risk-weighted assets) | 4,099,327 | 11.99% | 1,538,821 | 4.50% | 2,222,742 | 6.50% |
| Tier 1 leverage capital (to average assets) | 4,099,327 | 9.72% | 1,687,292 | 4.00% | 2,109,115 | 5.00% |

See "Regulation and Supervision—Capital and Related Requirements", "Regulation and Supervision—Prompt Corrective Action and Enforcement Powers" and Capital Resources earlier in this report for additional information regarding regulatory capital.

*Dividends*

Payments of dividends on our common stock are subject to the prior approval of the DFS and of the FDIC. Under New York law, we are prohibited from declaring a dividend so long as there is any impairment of our capital stock. In addition, we would be required to obtain the approval of the DFS if the total of all our dividends declared in any calendar year would exceed the total of our net profits for that year combined with retained net profits of the preceding two years, less any required transfer to surplus or a fund for the retirement of any preferred stock. We would also be required to obtain the approval of the FDIC prior to declaring a dividend if after paying the dividend we would be undercapitalized, significantly undercapitalized, or critically undercapitalized. See "—Prompt Corrective Action and Enforcement Powers." In addition, the FDIC has stated that excessive dividends can negate strong earnings performance and result in a weakened capital position and that dividends generally can be disbursed, in reasonable amounts, only after losses are eliminated and necessary reserves and prudent capital levels are established.

Because of the expected savings from the recently enacted Tax Cuts and Jobs Act of 2017, we declared our inaugural quarterly cash dividend of $0.56 per share, or a total of $31.0 million, which was paid on August 15, 2018 to our common shareholders of record at the close of business on August 1, 2018. The Bank declared its

second cash dividend of $0.56 per share, which was paid on November 15, 2018 to common shareholders of record at the close of business on November 1, 2018. On January 17, 2019, the Bank declared its third cash dividend of $0.56 per share, which was paid on February 15, 2019 to common shareholders of record at the close of business on February 1, 2019.

In addition, as stated in *Recent Highlights,* on October 17, 2018, Bank stockholders approved our common stock repurchase program which provides the Bank the ability to repurchase common stock from shareholders in the open market up to an amount of $500.0 million. During the fourth quarter in 2018, the Bank repurchased 358,492 shares of common stock for a total of $41.8 million. Therefore, as of December 31, 2018, the remaining program balance is $458.2 million.

Any future determination to pay dividends or buy back shares will be at the discretion of our Board of Directors and will be dependent upon then-existing conditions, including our financial condition and results of operations, capital requirements, commercial real estate concentration, contractual restrictions, business prospects and other factors that the Board of Directors considers relevant. Share buybacks are also subject to shareholder and regulatory approval, which were received for the repurchase program of up to $500.0 million in October and November 2018, respectively.

## (22) Segment Reporting

On an annual basis, we reevaluate our segment reporting conclusions. Based on our internal operating structure and the relative significance of the specialty finance business, we determined our operations are organized into two reportable segments representing our core businesses – Commercial Banking and Specialty Finance.

*Commercial Banking* consists principally of commercial real estate lending, commercial and industrial lending, and commercial deposit gathering activities.

*Specialty Finance* consists principally of financing and leasing products, including equipment, transportation, taxi medallion, commercial marine, municipal and national franchise financing and/or leasing.

Public companies are required to report certain financial and descriptive information about reportable segments. Segment information is reported using a “management approach” that is based on the way management organizes the segments for purposes of making operating decisions and assessing performance.

Management’s accounting process uses various estimates and allocation methodologies to measure the performance of the segments. To determine financial performance for each segment, the Company allocates funding costs and certain non-interest expenses to each segment, as applicable. Management does not consider income tax expense when evaluating segment profitability and, therefore, it is not disclosed in the tables below. Instead, the Bank’s income tax expense is calculated and evaluated at a consolidated level.

The following table presents financial data of our reportable segments (intersegment assets have not been eliminated):

| | *At or for the years ended December 31,* | | |
|---|---|---|---|
| *(in thousands)* | **2018** | **2017** | **2016** |
| **Commercial Banking** | | | |
| Interest income | $ 1,622,902 | 1,391,792 | 1,235,781 |
| Interest expense | 409,933 | 232,584 | 169,909 |
| Provision for (recovery of) loan and lease losses | 28,707 | 44,283 | (20,174) |
| Non-interest income | 18,738 | 31,486 | 39,293 |
| Non-interest expense | 432,819 | 392,041 | 353,481 |
| Income (loss) before income taxes | 770,181 | 754,370 | 771,858 |
| Total assets | $ 47,594,348 | 43,388,741 | 39,081,992 |
| **Specialty Finance** | | | |
| Interest income | $ 146,700 | 117,053 | 109,578 |
| Interest expense | 60,682 | 38,675 | 28,208 |
| Provision for (recovery of) loan and lease losses | 133,817 | 219,014 | 175,948 |
| Non-interest income | 4,564 | 4,579 | 3,491 |
| Non-interest expense | 53,483 | 43,049 | 23,324 |
| Income (loss) before income taxes | (96,718) | (179,106) | (114,411) |
| Total assets | $ 4,357,754 | 4,063,495 | 3,440,329 |

The following table provides reconciliations of net interest income, provision for (recovery of) loan and lease losses, non-interest income, non-interest expense, income (loss) before income taxes, and total assets for our reportable segments to the Consolidated Financial Statement totals:

| | At or for the years ended December 31, | | |
|---|---|---|---|
| *(in thousands)* | **2018** | **2017** | **2016** |
| **Net interest income:** | | | |
| Commercial Banking | $ 1,212,969 | 1,159,208 | 1,065,872 |
| Specialty Finance | 86,018 | 78,378 | 81,370 |
| Consolidated | $ 1,298,987 | 1,237,586 | 1,147,242 |
| **Provision for (recovery of) loan and lease losses:** | | | |
| Commercial Banking | $ 28,707 | 44,283 | (20,174) |
| Specialty Finance | 133,817 | 219,014 | 175,948 |
| Consolidated | $ 162,524 | 263,297 | 155,774 |
| **Non-interest income:** | | | |
| Commercial Banking | $ 18,738 | 31,486 | 39,293 |
| Specialty Finance | 4,564 | 4,579 | 3,491 |
| Eliminations | (24) | (24) | (34) |
| Consolidated | $ 23,278 | $ 36,041 | $ 42,750 |
| **Non-interest expense:** | | | |
| Commercial Banking | $ 432,819 | 392,041 | 353,481 |
| Specialty Finance | 53,483 | 43,049 | 23,324 |
| Eliminations | (24) | (24) | (34) |
| Consolidated | $ 486,278 | $ 435,066 | $ 376,771 |
| **Income (loss) before income taxes:** | | | |
| Commercial Banking | $ 770,181 | 754,370 | 771,858 |
| Specialty Finance | (96,718) | (179,106) | (114,411) |
| Consolidated | $ 673,463 | 575,264 | 657,447 |
| **Total assets:** | | | |
| Commercial Banking | $ 47,594,348 | 43,388,741 | 39,081,992 |
| Specialty Finance | 4,357,754 | 4,063,495 | 3,440,329 |
| Eliminations (1) | (4,587,286) | (4,334,516) | (3,474,710) |
| Consolidated | $ 47,364,816 | 43,117,720 | 39,047,611 |

(1) Eliminations related to intercompany funding.

## (23) Quarterly Data (unaudited)

| *(dollars in thousands, except per share amounts)* | March 31 | June 30 | September 30 | December 31 |
|---|---|---|---|---|
| **2018 QUARTER** | | | | |
| Interest income | $ 397,071 | 416,804 | 434,228 | 460,817 |
| Interest expense | 78,924 | 95,792 | 109,432 | 125,785 |
| Net interest income | 318,147 | 321,012 | 324,796 | 335,032 |
| Provision for loan and lease losses | 140,762 | 7,970 | 7,351 | 6,441 |
| Net interest income after provision for loan and lease losses | 177,385 | 313,042 | 317,445 | 328,591 |
| Non-interest income | 7,201 | 5,615 | 4,543 | 5,919 |
| Other-than-temporary impairment losses on securities, net | (16) | - | - | - |
| Non-interest income excluding other-than-temporary impairment losses on securities | 7,218 | 5,615 | 4,543 | 5,919 |
| Non-interest expense | 137,334 | 112,593 | 117,208 | 119,143 |
| Income before taxes | 47,252 | 206,064 | 204,780 | 215,367 |
| Income tax expense (benefit) | 12,781 | 51,479 | 49,334 | 54,527 |
| Net income | $ 34,471 | 154,585 | 155,446 | 160,840 |
| Basic earnings per common share | $ 0.64 | 2.84 | 2.84 | 2.94 |
| Diluted earnings per common share | $ 0.63 | 2.83 | 2.84 | 2.94 |
| **2017 QUARTER** | | | | |
| Interest income | $ 350,605 | 361,937 | 370,669 | 386,958 |
| Interest expense | 48,850 | 54,695 | 61,851 | 67,187 |
| Net interest income | 301,755 | 307,242 | 308,818 | 319,771 |
| Provision for loan and lease losses | 19,630 | 187,590 | 14,340 | 41,737 |
| Net interest income after provision for loan and lease losses | 282,125 | 119,652 | 294,478 | 278,034 |
| Non-interest income | 9,875 | 9,550 | 8,119 | 8,497 |
| Other-than-temporary impairment losses on securities, net | (159) | (81) | (361) | (32) |
| Non-interest income excluding other-than-temporary impairment losses on securities | 10,034 | 9,631 | 8,480 | 8,529 |
| Non-interest expense | 103,200 | 116,274 | 105,628 | 109,964 |
| Income before taxes | 188,800 | 12,928 | 196,969 | 176,567 |
| Income tax expense (benefit) | 54,886 | (1,030) | 72,498 | 61,701 |
| Net income | $ 133,914 | 13,958 | 124,471 | 114,866 |
| Basic earnings per common share | $ 2.49 | 0.26 | 2.30 | 2.12 |
| Diluted earnings per common share | $ 2.48 | 0.26 | 2.29 | 2.11 |

**(This page has been left blank intentionally.)**

## Exhibit Index

| Exhibit No. | Exhibit |
|---|---|
| 3.1 | Restated Organization Certificate. (Incorporated by reference to Signature Bank's Quarterly Report on Form 10-Q for the period ended June 30, 2005.) |
| 3.2 | Certificate of Amendment to the Bank's Restated Organization Certificate with respect to Signature Bank's Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series A, par value $0.01 per share. (Incorporated by reference to Signature Bank's Current Report on Form 8-K filed on December 17, 2008.) |
| 3.3 | Certificate of Amendment to the Bank's Restated Organization Certificate. (Incorporated by reference from Annex A to the 2017 Definitive Proxy Statement on Schedule 14A, filed with the Federal Deposit Insurance Corporation on March 10, 2017.) |
| 3.4 | Amended and Restated By-laws of the Registrant. (Incorporated by reference to Signature Bank's Current Report on Form 8-K filed on January 23, 2018.) |
| 4.1 | Specimen Common Stock Certificate. (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 10.1 | Signature Bank Amended and Restated 2004 Long-Term Incentive Plan. (Incorporated by reference from Appendix B to the 2018 Definitive Proxy Statement on Schedule 14A, filed with the Federal Deposit Insurance Corporation on April 25, 2018.) |
| 10.2 | Amended and Restated Signature Bank Change of Control Plan. (Incorporated by reference to Signature Bank's Current Report on Form 8-K, filed with the Federal Deposit Insurance Corporation on September 19, 2007.) |
| 10.4 | Networking Agreement, effective as of April 18, 2001, between Signature Securities and Signature Bank. (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 10.13 | Employment Agreement, dated March 22, 2004, between Signature Bank and Joseph J. DePaolo. (Incorporated by reference to Signature Bank's Registration Statement on Form 10 or amendments thereto, filed with the Federal Deposit Insurance Corporation on March 17, 2004.) |
| 14.1 | Code of Ethics (Incorporated by reference from Signature Bank's 2004 Form 10-K, filed with the Federal Deposit Insurance Corporation on March 16, 2005.) |
| 21.1 | Subsidiaries of Signature Bank. |
| 31.1 | Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 32.1 | Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |

**EXHIBIT 21.1**

## SUBSIDIARIES OF SIGNATURE BANK

As of March 1, 2019, Signature Bank has the following significant subsidiaries:

| Subsidiary | State or Jurisdiction Under Which Organized |
|---|---|
| Signature Preferred Capital, Inc. | New York |
| Signature Financial, LLC | New York |

**EXHIBIT 31.1**

## CERTIFICATION

I, Joseph J. DePaolo, certify that:

1. I have reviewed this annual report on Form 10-K of Signature Bank for the fiscal year ended December 31, 2018;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Examining 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: March 1, 2019

/s/ JOSEPH J. DEPAOLO

Joseph J. DePaolo
*President, Chief Executive Officer and Director*

**EXHIBIT 31.2**

## CERTIFICATION

I, Vito Susca, certify that:

1. I have reviewed this annual report on Form 10-K of Signature Bank for the fiscal year ended December 31, 2018;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Examining 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: March 1, 2019

/s/ VITO SUSCA

Vito Susca

*Executive Vice President and Chief Financial Officer*

**EXHIBIT 32.1**

**Certification**
**Pursuant to 18 U.S.C. Section 1350**
**As Adopted Pursuant to**
**Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Signature Bank, a New York bank (the "Company"), does hereby certify, to the best of such officer's knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2018 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 1, 2019

/s/ JOSEPH J. DEPAOLO
Joseph J. DePaolo
President, Chief Executive Officer and Director

Dated: March 1, 2019

/s/ VITO SUSCA
Vito Susca
Executive Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-K or as a separate disclosure document.

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# CORPORATE INFORMATION

## BOARD OF DIRECTORS

**Scott A. Shay**
Co-founder & Chairman of
the Board of Directors
Signature Bank

**Kathryn A. Byrne, CPA**
Partner
MAZARS USA LLP

**Derrick D. Cephas**
Partner
Weil, Gotshal & Manges LLP

**Alfonse M. D'Amato**
Managing Director
Park Strategies, LLC
Former U.S. Senator

**Joseph J. DePaolo**
Co-founder, President &
Chief Executive Officer
Signature Bank

**Barney Frank**
Former U.S. Congressman

**Judith A. Huntington**
President
Pegasus Financial Concierge

**Jeffrey W. Meshel**
Co-founder
Paradigm Capital Corp.

**John Tamberlane**
Co-founder & Vice Chairman
Signature Bank

## SENIOR MANAGEMENT

**Scott A. Shay**
Co-founder & Chairman of
the Board of Directors

**Joseph J. DePaolo**
Co-founder, President &
Chief Executive Officer

**John Tamberlane**
Co-founder & Vice Chairman

**Mark T. Sigona**
Executive Vice President &
Chief Operating Officer

**Eric R. Howell**
Executive Vice President -
Corporate & Business Development

**Peter S. Quinlan**
Executive Vice President &
Treasurer

**Vito Susca**
Executive Vice President &
Chief Financial Officer

**Thomas Kasulka**
Executive Vice President &
Chief Lending Officer

**Michael Sharkey**
Senior Vice President &
Chief Technology Officer

**Brian Twomey**
Senior Vice President &
Chief Credit Officer

## STOCKHOLDER INFORMATION

**Signature Bank**
565 Fifth Avenue
New York, NY 10017
646-822-1500
866-SIG-LINE (866-744-5463)
www.signatureny.com

**Counsel**
Paul, Weiss, Rifkind, Wharton & Garrison LLP
285 Avenue of the Americas
New York, NY 10019
212-373-3000

**Independent Auditors**
KPMG LLP
345 Park Avenue
New York, NY 10154-0102
212-758-9700

**Stock Transfer Agent & Registrar**
American Stock Transfer
6201 15th Avenue
Brooklyn, NY 11219
718-921-8200

**Stock Trading Information**
The Bank's common stock is traded on
the Nasdaq Global Select Market under
the symbol SBNY.

**Annual Meeting**
The annual meeting of stockholders will be
held on April 18, 2019, 9:00 AM local time, at:

The Roosevelt Hotel
45 East 45th Street
New York, NY 10017
212-661-9600

**Form 10-K**
A copy of Signature Bank's Annual Report
on Form 10-K filed with the FDIC is
available without charge by download from
www.signatureny.com, or by written request to:

Signature Bank
Attention: Investor Relations
565 Fifth Avenue
New York, NY 10017

Certain statements in this Annual Report, and certain oral statements made from time to time by representatives of the Bank, that are not historical facts may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Reform Act"). Such forward-looking statements are based on the Bank's current expectations, speak only as of the date on which they are made and are susceptible to a number of risks, uncertainties and other factors. The Bank's actual results, performance and achievements may differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements. For those statements, the Bank claims the protection of the safe harbor for forward-looking statements contained in the Reform Act. See "Private Securities Litigation Reform Act Safe Harbor Statement" and "Part I, Item 1A. Risk Factors," appearing in the Bank's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, included herein.

SIGNATURE BANK

565 Fifth Avenue
New York, NY 10017

866-SIG-LINE (866-744-5463)
www.signatureny.com

## LOCATIONS

### Manhattan
261 Madison Avenue
485 Madison Avenue
71 Broadway
565 Fifth Avenue
950 Third Avenue
200 Park Avenue South
1020 Madison Avenue
50 West 57th Street
2 Penn Plaza
111 Broadway
(Accommodation Office)

### Brooklyn
26 Court Street
6321 New Utrecht Avenue
97 Broadway
9003 3rd Avenue
84 Broadway
(Accommodation Office)

### Queens
36-36 33rd Street, Long Island City
78-27 37th Avenue, Jackson Heights
89-36 Sutphin Boulevard, Jamaica
118-35 Queens Boulevard, Forest Hills

### Bronx
421 Hunts Point Avenue

### Staten Island
2066 Hylan Boulevard
1688 Victory Boulevard

### Westchester
1C Quaker Ridge Road, New Rochelle
360 Hamilton Avenue, White Plains

### Long Island
900 Stewart Avenue, Garden City
53 North Park Avenue, Roczkville Centre
68 South Service Road, Melville
923 Broadway, Woodmere
40 Cuttermill Road, Great Neck
100 Jericho Quadrangle, Jericho
360 Motor Parkway, Hauppauge
58 South Service Road, Melville
(Accommodation Office)

### Connecticut
75 Holly Hill Lane, Greenwich

### California
201 Mission Street, San Francisco

### SBA Institutional Trading & Sales
9 Greenway Plaza, Suite 3120
Houston, TX 77046

### Signature Securities Group
1177 Avenue of the Americas
New York, NY 10036

### Signature Financial LLC
225 Broadhollow Road, Suite 132W
Melville, NY 11747

Seattle National Originations Office
12100 NE 195th Street, Suite 135
Bothell, WA 98011

### Signature Public Funding Corp.
600 Washington Avenue, Suite 305
Towson, MD 21204