Wells Fargo & Company
2017 Annual Report

Rebuilding Trust

In Washington, Theresa Desautel is navigating small business ownership with help from Wells Fargo.

Learn more on page 30.

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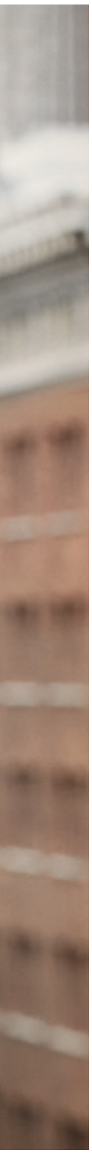
Cover: *In Florida, customer Alexandra Wilkinson, right, has a conversation about her finances with Personal Banker Nicole Allegretto. Learn more on page 24.*

Dear fellow shareholders,

Elizabeth A. Duke

Chair, Board of Directors
Wells Fargo & Company

I am honored to serve as chair of the board of directors of Wells Fargo, a company with a long history of success and a unique opportunity to learn from its challenges and become better, stronger, and more customer-focused than ever before.



For that to happen, we must embrace change. Our CEO, Tim Sloan, has been relentless in making the kinds of changes that are required for us to achieve our six shared goals — namely, for Wells Fargo to be *the* financial services leader in customer service and advice, team member engagement, innovation, risk management, corporate citizenship, and shareholder value. Tim writes in his CEO letter (page 6) about the transformation he is leading, and I would like to highlight some of the actions the board of directors has taken to enhance our governance and oversight of Wells Fargo. Many of these actions will help us satisfy the requirements of the consent order that the company entered into with the Board of Governors of the Federal Reserve System on Feb. 2, 2018.

The board recognizes that we must continue to strengthen and enhance our oversight and risk management practices. Our board is committed to meeting the expectations of our regulators and protecting and serving the interests of our shareholders, customers, team members, and communities. To support these efforts, in recent months we have made significant changes to board composition, reconstituted several board committees, amended committee charters, and worked with Wells Fargo senior management to improve the reporting and analysis provided to the board. These actions were informed by rigorous self-examination. The board's independent directors engaged in a comprehensive, independent investigation of Wells Fargo's retail banking sales practices and drew important conclusions. In addition, the board conducted a thoughtful and deliberate self-evaluation of its own effectiveness, facilitated by Mary Jo White, a senior partner at Debevoise & Plimpton LLP and former chair of the Securities and Exchange Commission.

Many of the changes we made also reflected the feedback we received as part of the company's long-standing investor engagement program. Following my election as board chair, I met with many of our shareholders to discuss our progress and listen to their feedback. To help provide insights from a stakeholder perspective, including insights on current and emerging issues relevant to the company, we formed a Stakeholder Advisory Council. It includes seven members, all external, representing groups focused on consumer banking, fair lending, the environment, human rights, civil rights, and governance. Tim and I began meeting with this group in December 2017. The council's feedback has proven valuable in informing how we can be responsive to our stakeholders and assess our progress, and I look forward to continuing our engagement in the future.

Board composition and capabilities

At our 2017 annual meeting, Wells Fargo shareholders sent the entire board a clear message. The board heard that message and, as part of our response, we took a number of actions to refresh the board, including electing four new independent directors and announcing the retirement of three long-serving directors who retired at the end of 2017. In total, we elected six new independent directors — Celeste Clark, Theodore Craver, Maria Morris, Karen Peetz, Juan Pujadas, and Ronald Sargent — and five retired in 2017. As we announced in February 2018, and in furtherance of our board succession planning process, three additional directors are expected to retire by the date of our 2018 Annual Meeting of Shareholders and a fourth by the end of 2018. We are taking great care, as part of our board refreshment process, to appropriately balance new perspectives with the experience of existing directors while undergoing an orderly transition of roles and responsibilities on the board and its committees.

Our new directors bring a broad range of capabilities, including expertise in financial services, risk management, technology, human capital management, finance and accounting, corporate responsibility, and regulatory matters. Throughout the transition, the board has also maintained its focus on diversity, and I am proud that of our six new directors elected in 2017, four are women or people of color.

Risk oversight

Understanding that effective risk management protects and benefits all stakeholders, the board has made several important changes so that risks are properly identified, evaluated, and escalated. These fall into two main categories: changes in board committee composition and oversight responsibilities, and enhancements to management reporting.

Committee composition and oversight responsibilities

We reconstituted our Risk Committee to add new perspectives and expertise. Karen Peetz, retired president of The Bank of New York Mellon, was appointed chair of the Risk Committee; Juan Pujadas, a retired principal of PwC, joined the committee in 2017; and Maria Morris, a retired MetLife executive, joined early in 2018. Wells Fargo is classified as a Systemically Important Financial Institution (SIFI), and all three join me in bringing experience with the regulatory expectations, especially in risk management, of SIFIs. Suzanne Vautrinot, a retired major general in the U.S. Air Force responsible for its cyber command and network operations, also joined the Risk Committee, providing it with additional cyber expertise.

The charters of the Risk Committee and the Audit and Examination Committee were amended to (1) consolidate oversight of the company's compliance, operational, technology, information security, and financial crimes risk programs under the Risk Committee and (2) maintain oversight of financial reporting, the company's independent auditor, and other audit-related activities under the Audit and Examination Committee. We also expanded the Human Resources Committee's oversight responsibilities to include human capital management, ethics, and culture.

Reporting practices and oversight

Applying key learnings from our investigation into sales practices, we have made significant changes to the way management escalates risk issues and reports them to the board. The company has focused on examining business practices across the company by using third-party experts to conduct independent reviews of business and risk practices. In addition, where we identify an issue, management is conducting a root cause analysis, holding individuals accountable when appropriate, changing processes (and in some cases, changing business models), and most important, assessing and remediating customer harm. The board has set clear expectations that, as issues are identified, they will be reported promptly to the board and our regulators.

At the same time, we enhanced our oversight of conduct risk, including sales practice risk, through the company's Conduct Management Office. Created to consolidate internal investigations, EthicsLine and ethics oversight, complaints oversight, and sales practice oversight, the Conduct Management Office reports regularly to the Risk Committee on its activities and to the Human Resources Committee on matters related to team members. In addition, the full board receives updates at least twice a year from this office.

We have made significant changes to the way management escalates risk issues and reports them to the board.

To fulfill its broader charter responsibilities, the Human Resources Committee receives reports on matters involving team members, including reports related to leadership planning, training and development, compensation and benefits, culture, ethics, and the company's code of ethics and business conduct. The committee continues to oversee the company's incentive compensation risk management program, and its scope was expanded in 2017 to include a broader population of team members and incentive plans.

We will continue to make changes in 2018 to further enhance the board's effectiveness in carrying out its oversight and governance of the company, consistent with the Federal Reserve consent order.

Financial performance

Even as we reorganize for better risk oversight, we remain focused on the financial performance of the company. I would characterize the company's financial performance in 2017 as solid. We ordinarily would have expected to see more earnings growth; however, taking into consideration the reputation challenges and significant legal and regulatory expenses resulting from sales practices and other matters, we consider it positive that we maintained profitability and a return on equity that ranks near the top of our peer group. Nevertheless, we all know that we can do better.

Much of the work underway to improve risk management and controls will benefit the customer experience and should lead to a reduction in overall operating expenses going forward. We also expect that investments in innovation will pay off in revenue growth and expense reduction. Finally, a disciplined process is underway to consolidate functions across the enterprise and simplify procedures and systems, resulting in significant cost savings and improved effectiveness.

Our capital levels remained strong, and we were able to return $14.5 billion to shareholders through common stock dividends and net share repurchases in 2017, up 16 percent from 2016. We continue to believe that our diversified business model, nationwide franchise, and investment in innovation — along with our commitment to the six goals I mentioned earlier — will create long-term value for our investors.

In appreciation

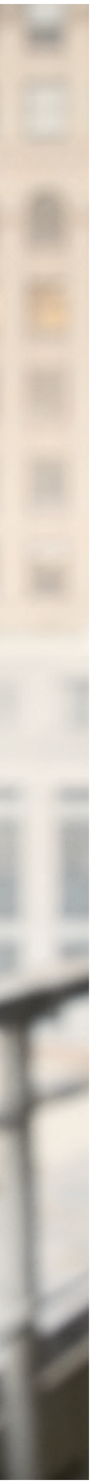
At the end of 2017, three long-serving directors — Stephen Sanger, Cynthia Milligan, and Susan Swenson — retired from the board. On behalf of the entire board of directors, I want to thank Steve for his tireless work as chairman. With a steady determination, he led us to the necessary changes I have outlined here. I would also like to recognize Cynthia and Sue for their many contributions and service to the board and company. Cynthia and Sue retired with a combined 44 years on the board, a tribute to Wells Fargo's long-standing commitment to gender diversity on the board and an inspiration to leaders of the future.

And to you, our shareholders, thank you for your continued investment in our company. We recognize the commitment that you, as investors in Wells Fargo, have made in the company. We are confident that the optimistic leadership provided by our CEO, combined with the operational and cultural changes we have made and are making at the company and on the board, will mark 2018 as a positive inflection point on our quest to rebuild trust and become a better company. We greatly value and appreciate your investment.

Sincerely,

Elizabeth A. Duke
Chair, Board of Directors
Wells Fargo & Company
February 15, 2018


Timothy J. Sloan
Chief Executive Officer and President
Wells Fargo & Company



To our owners,

This was a year of transformation at Wells Fargo. We achieved a great deal in 2017 and look forward to building on our momentum in the months ahead.

Our top priority remains rebuilding the trust of our customers, team members, communities, regulators, and shareholders. We have made foundational changes to identify and fix problems so they do not happen again and achieved significant progress in our commitment to make things right for our customers and build a better bank. Our transformation is grounded in our vision of satisfying our customers' financial needs and helping them succeed financially. While we have more work to do, I assure you that the Operating Committee and I are fully committed to building on our accomplishments. In addition, we take very seriously the consent order we entered into with the Board of Governors of the Federal Reserve System in February 2018, and we will work diligently, yet swiftly, to meet the requirements.

In response to feedback from our team, we introduced a streamlined Vision, Values & Goals of Wells Fargo in late 2017 — replacing what previously was a 37-page expression of our culture. Today the wallet-sized booklet focuses exclusively on our guiding principles and goals, clearly expressing the beliefs that guide every team member as we work together to build the best Wells Fargo possible:

- Our consistent vision of helping customers succeed financially.
- Our five values, which articulate what's most important to us: what's right for customers, people as a competitive advantage, ethics, diversity and inclusion, and leadership.
- Our six goals: becoming *the* financial services leader in customer service and advice, team member engagement, innovation, risk management, corporate citizenship, and shareholder value.

Our Operating Committee is committed to ensuring that our Vision, Values & Goals are embedded in everything we do and in every decision we make, and more than 260,000 team members bring it all to life.

In 2017 we added two new senior leaders to our Operating Committee. In March, Allen Parker joined Wells Fargo as general counsel, after Jim Strother announced his retirement. Allen has a distinguished career as one of the country's leading practitioners of banking and finance law as a partner, and subsequently managing partner, at Cravath, Swaine and Moore LLP. We have benefited immensely from his experience and advice. In July, Jon Weiss became head of Wealth and Investment Management when David Carroll retired. Jon had been head of Wells Fargo Securities, and his significant and diverse expertise in financial services — spanning capital markets, advisory, and investment banking — will ensure we continue to deliver market-leading investment advice and services to our clients.

Another change we have made is to consolidate leadership of the Community Bank and Consumer Lending under Mary Mack. This change will support our consumer strategy — our approach that seeks to deliver an outstanding customer experience by recognizing the distinct needs of each customer segment and that extends across business lines and products. In January 2018, Chief Risk Officer Mike Loughlin announced his intention to retire after 36 years with the company. Mike is staying on to assist with the transition to his yet-to-be-named successor. I wish to thank Jim, David, and Mike for their leadership and tremendous contributions to Wells Fargo over many years.

I am grateful to the board of directors for their support and for the strong leadership of Stephen Sanger and Betsy Duke during the past year. With their experience and active involvement, Steve and Betsy have been indispensable as we worked to rebuild trust and grow stronger. As Betsy outlines in her letter (page 2), the board has undergone a significant evolution, including adding new members, making changes to the leadership and composition of the board's committees, and strengthening oversight and reporting.

Our actions

The first step toward building a better Wells Fargo was to take actions to address our challenges. We have acted to fix what was wrong, make things right, and ensure that such problems do not happen again.

On Feb. 2, 2018, we entered into a consent order with the Board of Governors of the Federal Reserve related to the board's governance oversight and the company's compliance and operational risk. Under the terms of the consent order, the company will submit plans to the Federal Reserve within 60 days that detail our completed and planned actions to further enhance the board's governance oversight and the company's compliance and operational risk management program. After Federal Reserve approval, the company will engage independent third parties to conduct a review to be completed no later than Sept. 30, 2018.

Until the third-party review is completed to the satisfaction of the Federal Reserve, we are required to hold our total consolidated assets at Dec. 31, 2017, levels. Fortunately, our balance sheet provides us with flexibility to manage within the asset cap and continue to serve customers.

The consent order is not related to any new matters but instead to prior issues in which we have already made significant progress. The Federal Reserve acknowledged our progress, and we agree that there is more work to do. As we do with all regulatory matters, we take the consent order very seriously, and we are confident in our ability to meet the requirements while continuing to serve customers' financial needs.

Some of the broader changes we have made across our company following our sales practices settlement in September 2016 include eliminating product sales goals for retail bankers who serve customers in branches and call centers; implementing a new incentive compensation program focused on customer experience, stronger oversight and controls, and team versus individual rewards within the retail bank; centralizing key enterprise staff functions like Human Resources and Finance; and strengthening our risk and compliance controls as we further our cohesive approach to managing risk companywide. We also established a Conduct Management Office to centralize the way we oversee ethics at Wells Fargo (including our internal EthicsLine) as well as how we handle internal investigations, complaints, and sales practices oversight.

We simplified and streamlined the Community Bank's leadership structure so we can continue to put our focus and resources on what matters: the unique needs of customers, the branch team member experience, and our business priorities. This new structure is more efficient, improves risk management, and brings Community Bank leaders closer to customers and front-line team members.

Other changes in our Community Bank include an automatic notification to any customer who opens a new personal or small business checking account, savings account, or credit card. We have also implemented a robust "mystery shopper" program encompassing 15,000–18,000 visits a year, and our independent internal Community Banking Risk Management team completed 450 unannounced conduct risk reviews during 2017 to evaluate retail branch sales and service activities to ensure customers received only the products and services they requested.

We are committed to making things right for any customer who was financially harmed by unacceptable sales practices — regardless of when they occurred. We reimbursed customers who incurred fees or financial harm from potentially unauthorized accounts identified through an extensive third-party account review. We've conducted broad outreach and worked directly with customers to resolve issues through our complaints process and free mediation services. And we are in the final stages of completing the actions required by a $142 million class-action settlement to make things right for customers impacted by improper sales practices.

As part of our transformation, we committed to a thorough review of the products we offer and the internal procedures we use to get things done. When we uncover anything that may be questionable, we address it. For example, we made fundamental changes to our auto lending business and have begun to remediate customers who may have been financially harmed by issues related to Collateral Protection Insurance policies. These were policies purchased through a third-party vendor on their behalf where the bank was unable to determine whether the customer maintained insurance covering physical damage to the vehicles that secured their loans.

Additionally, we are working to reach out to all home lending customers who paid fees for mortgage interest rate lock extensions requested between Sept. 16, 2013, and Feb. 28, 2017, and to refund, with interest, customers who believe they shouldn't have paid those fees. We also changed how we manage the mortgage interest rate lock extension process by establishing a centralized review team in March 2017.

I am pleased and optimistic about the actions we took in 2017 and am confident we will be able to resolve the matters included in the Federal Reserve consent order while we continue to serve customers, support team members, and help our local communities.

I can say without reservation that Wells Fargo today is a better company than it was a year ago, and I am confident we will be even better a year from now.

We still have work to do. We have put the right leaders in the right roles to drive that work, and together we are focused on rebuilding the trust of our stakeholders and becoming a stronger company.

I can say without reservation that Wells Fargo today is a better company than it was a year ago, and I am confident we will be even better a year from now.

Financial report

Our financial results in 2017 reflected the strength of our diversified business model as well as the strides we are making in transforming our company. Once again, we delivered solid financial performance for shareholders. Wells Fargo generated $22.2 billion in net income, or $4.10 of diluted earnings per common share, in 2017, an increase of 1 percent and 3 percent, respectively, from 2016. Revenue grew modestly from $88.3 billion in 2016 to $88.4 billion in 2017, as 4 percent growth in net interest income was predominately offset by a decrease in noninterest income.

Our performance benefited from a healthy economy and our disciplined credit risk management. Credit quality remained strong, and our loan portfolio continued to be the largest of all U.S. banks, with $956.8 billion in outstanding loans. Net charge-offs of 0.31 percent of average loans remained at historic lows. Average deposits grew by 4 percent to a record $1.3 trillion.

Client assets in Wealth and Investment Management reached a record $1.9 trillion. Debit card purchase volume increased 6 percent over 2016, and balances in our consumer general purpose credit card portfolio grew 6 percent. We also set a record for new financings in Wells Fargo Capital Finance in 2017, illustrating the benefit of the GE Capital acquisition and our effective collaboration across our Wholesale Banking businesses.

We continue to enjoy strong liquidity and capital levels. We ended 2017 with total equity of $208.1 billion, Common Equity Tier 1 capital of $154.0 billion, and a Common Equity Tier 1 capital ratio (fully phased-in) of 11.98 percent[1], which is well above our regulatory minimum of 9 percent and our internal target of 10 percent.

As we transform into a better, stronger Wells Fargo, we are pursuing a $4 billion expense-reduction target by driving cost savings and developing more effective processes. This work, led by Chief Financial Officer John Shrewsberry, affects nearly every area of the company. We expect to achieve these savings through a range of initiatives, including centralization and optimization of similar work in staff and business groups, rigorous control of professional services and third-party expenses, consolidation of corporate properties, and a reduction in travel.

The first $2 billion target by the end of 2018 is being reinvested into our business to fund improvements in a range of programs, including those that are transforming and modernizing compliance, technology, risk management, cybersecurity, and data; the second $2 billion target by the end of 2019 is expected to drop to our bottom line.

Data modernization is a significant element in driving efficiency at Wells Fargo. It encompasses reducing the number of internal platforms and databases we manage, consolidating single-customer data from multiple businesses into one place, and improving fraud detection based on aggregated information. In addition to making us more streamlined and effective, data modernization also can increase the speed with which we bring innovative new products and services to market. In the end, we believe that using data and technology to help our customers better manage their finances will enable us to grow and build more long-term relationships.

Our transformation

To focus our transformation efforts, we have established the six long-term goals mentioned earlier that our entire company can rally around. We believe these can make Wells Fargo over time not just *a* leader but *the* financial services leader in customer service and advice, team member engagement, innovation, risk management, corporate citizenship, and shareholder value. We have good news to report in each of these areas.

Customer service and advice

Whether we are working with an individual, a family, a small business, a growing company, a public institution, or a global firm, we want to know and understand our customers and their financial goals. Then, to help them be financially successful, we want to provide best-in-class service and guidance that will help them reach their goals.

Our diversified business model enables us to advise and serve our customers at every step of their financial lives. Take Pam and Larry Hall of St. Paul, Minnesota, who three decades ago started a company called Logistics Planning Services (LPS), which facilitates the shipping of goods between different points. Pam was a checking account customer, and she turned to our Business Banking Group, which took care of LPS as it grew. Over the years, the Halls turned to Wells Fargo for advice, financing, and services that helped their business succeed. The Halls decided to sell their business last spring, and now they have transitioned from being Business Banking customers to working with Wealth Management as they move to the next phase of their lives. The Halls' story illustrates how we are at our best when we work

[1] For more information on our regulatory capital and related ratios, please see the "Financial Review — Capital Management" section in this Report.

Our Performance

$ in millions, except per share amounts	2017	2016	% CHANGE
FOR THE YEAR			
Wells Fargo net income	$ 22,183	21,938	1
Wells Fargo net income applicable to common stock	20,554	20,373	1
Diluted earnings per common share	4.10	3.99	3
Profitability ratios:			
Wells Fargo net income to average assets (ROA)	1.15%	1.16	(1)
Wells Fargo net income applicable to common stock to average Wells Fargo common stockholders' equity (ROE)	11.35	11.49	(1)
Return on average tangible common equity (ROTCE)[1]	13.55	13.85	(2)
Efficiency ratio[2]	66.2	59.3	12
Total revenue	$ 88,389	88,267	–
Pre-tax pre-provision profit[3]	29,905	35,890	(17)
Dividends declared per common share	1.540	1.515	2
Average common shares outstanding	4,964.6	5,052.8	(2)
Diluted average common shares outstanding	5,017.3	5,108.3	(2)
Average loans	$ 956,129	949,960	1
Average assets	1,933,005	1,885,441	3
Average total deposits	1,304,622	1,250,566	4
Average consumer and small business banking deposits[4]	758,271	732,620	4
Net interest margin	2.87%	2.86	–
AT YEAR-END			
Investment securities	$ 416,420	407,947	2
Loans	956,770	967,604	(1)
Allowance for loan losses	11,004	11,419	(4)
Goodwill	26,587	26,693	–
Assets	1,951,757	1,930,115	1
Deposits	1,335,991	1,306,079	2
Common stockholders' equity	183,134	176,469	4
Wells Fargo stockholders' equity	206,936	199,581	4
Total equity	208,079	200,497	4
Tangible common equity[1]	153,730	146,737	5
Capital ratios[5]:			
Total equity to assets	10.66%	10.39	3
Risk-based capital[6]:			
Common Equity Tier 1	12.28	11.13	10
Tier 1 capital	14.14	12.82	10
Total capital	17.46	16.04	9
Tier 1 leverage	9.35	8.95	4
Common shares outstanding	4,891.6	5,016.1	(2)
Book value per common share[7]	$ 37.44	35.18	6
Tangible book value per common share[1,7]	31.43	29.25	7
Team members (active, full-time equivalent)	262,700	269,100	(2)

1 Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, and goodwill and certain identifiable intangible assets (including goodwill and intangible assets associated with certain of our nonmarketable equity investments and held-for-sale assets, but excluding mortgage servicing rights), net of applicable deferred taxes. The methodology of determining tangible common equity may differ among companies. Management believes that return on average tangible common equity and tangible book value per common share, which utilize tangible common equity, are useful financial measures because they enable investors and others to assess the Company's use of equity. For additional information, including a corresponding reconciliation to GAAP financial measures, see the "Financial Review – Capital Management – Tangible Common Equity" section in this Report.

2 The efficiency ratio is noninterest expense divided by total revenue (net interest income and noninterest income).

3 Pre-tax pre-provision profit (PTPP) is total revenue less noninterest expense. Management believes that PTPP is a useful financial measure because it enables investors and others to assess the Company's ability to generate capital to cover credit losses through a credit cycle.

4 Consumer and small business banking deposits are total deposits excluding mortgage escrow and wholesale deposits.

5 See the "Financial Review – Capital Management" section and Note 27 (Regulatory and Agency Capital Requirements) in this Report for additional information.

6 The risk-based capital ratios were calculated under the lower of Standardized or Advanced Approach determined pursuant to Basel III with Transition Requirements. The risk-based capital ratios were all lower under the Standardized Approach for 2017. The total capital ratio was lower under the Advanced Approach and the other ratios were lower under the Standardized Approach for 2016.

7 Book value per common share is common stockholders' equity divided by common shares outstanding. Tangible book value per common share is tangible common equity divided by common shares outstanding.

together, focus on our customers' specific needs, and build long-term relationships to support them as they grow. This kind of relationship banking is a hallmark of our company.

A key element of rebuilding trust for customers and team members in our Community Bank is Change for the Better, a new framework that seeks to reshape and improve the Wells Fargo experience. Change for the Better includes new systems, processes, and tools introduced in phases. We have already devoted more than 300,000 hours of training to implementing the first phase of change. Among many other improvements, Change for the Better empowers team members to have more meaningful conversations with customers about their financial goals (page 24) and to solve problems for them on the spot. We also are increasing the digital offerings in our branches so both bankers and customers can benefit from speed, convenience, and aggregated financial information. Change for the Better's first phase of improvements launched in September 2017, and we have received positive feedback from customers and team members about the experience we are providing.

We also have made a number of customer-friendly changes to help customers better manage their accounts. For example, in March we introduced automatic zero balance alerts, and we now send more than 18 million real-time alerts a month, enabling our customers to make a deposit or transfer so they don't overdraw their account. In November, we introduced Overdraft Rewind℠, which in its first two months helped more than 350,000 direct-deposit customers avoid overdraft charges by including direct deposits received by 9 a.m. the next day in a re-evaluation of the prior day's transactions which resulted in a fee.

We continue to expand our offerings for small business customers. Wells Fargo is training and hiring team members: More than 11,000 of our branch bankers have completed our Business Advocate Program training, and we are expanding our teams that serve small businesses with $2 million to $5 million in annual revenue. Through Wells Fargo Works *for Small Business®*, we are delivering a wide range of financial resources, guidance, and services that will help small businesses take the next step toward their goals. Today, wellsfargoworks.com includes a Business Plan Tool, giving business owners a way to create and update a business plan, a Business Credit Center to make it easier to find credit options and increase understanding of how credit decisions are made, and a new Marketing Center to help address the marketing needs of small business owners.

Our Wholesale Banking team, under the leadership of Perry Pelos, is one of the largest sources of financing to help maintain and grow the country's essential infrastructure. Through lending and underwriting bonds, we provide funding sources for roads, bridges, airports, ports, water and sewer systems, not-for-profit hospitals, affordable housing, higher education, and K-12 schools nationwide. As an example, in December 2017 we served as lead underwriter for a $929 million financing for Miami-Dade County to improve its water and sewer system with infrastructure that is critical to sanitary sewer and clean water efforts.

In every line of business, we are taking a hard look at the advice and service we are providing and asking ourselves, "How can we do better?" Whether it's through additional training, more readily available data, or an entirely new customer service model, we are focused on how we can help our customers every day.

Team member engagement

Team members are our most valuable resource and a key competitive advantage for Wells Fargo. We cannot transform into a better, stronger Wells Fargo without their talent and dedication. We work hard to create an atmosphere for our team members in which everyone feels respected and empowered to speak up, and we seek to nurture a diverse and inclusive workplace. How our work gets done is as important as getting the work done. Promoting |an atmosphere of engaged team members not only makes Wells Fargo a great place to work, it results in great customer service.

In 2017, we asked for ideas and feedback from our team members — a lot. We conducted surveys, assessments, and focus groups on everything from company culture to the benefits we offer to how our team members feel about Wells Fargo overall. We've listened as team members asked questions in town hall meetings and through our internal channels so we can understand themes and trends. Our teams have sifted through tens of thousands of comments and survey feedback so we can better understand what's important to team members and where we may not be fully living up to their expectations.

The information we get from our team members is key to understanding where we need to strengthen our culture so we are all living Wells Fargo's values every day. Under the leadership of Chief Administrative Officer Hope Hardison, we are driving for a consistent culture across the company, and we aim to communicate more effectively so team members are clear on what we expect of them. This is especially important in a time of transformation.

We are making investments in our team members. At the beginning of 2017, we raised the minimum wage base range for U.S.-based entry-level team members to $13.50 an hour, benefiting about 36,000 team members. Following the passage of the federal Tax Cuts and Jobs Act in December 2017, we announced plans to increase the minimum pay rate again, to $15 an hour, in March 2018. This will benefit approximately 70,000 team members, including those already earning $15 an hour or close to that amount, who will also receive a pay increase. In November, we announced an award of restricted share rights equivalent to 50 shares of Wells Fargo stock to eligible full-time employees, and the equivalent of 30 shares to eligible part-time employees, with a two-year vesting period. Approximately 250,000 team members will receive this benefit in the first quarter of 2018. In the past year, we have added two company holidays to our paid time off program, plus two "personal holidays" that team members may use to take time off to celebrate days that are of religious, family, cultural, patriotic, community, or diversity significance. We continue to offer a compensation package that includes competitive salaries, training and development options, leadership opportunities, and benefits that include affordable health care options, work-life balance programs, 401(k) matching contributions, a discretionary profit-sharing plan, and family leave. Team member turnover is at its lowest level since 2013.

Diversity and inclusion is a longtime value at Wells Fargo, and we seek to foster that in many ways. We offer leadership development programs that serve team members with diverse abilities and Latino, Asian-Pacific, LGBTQ, Black/African American, and Veteran team members, as well as other recruiting, training, and development initiatives. We have 10 robust Team Member Networks through which team members with a shared affinity or background can connect and build their skills. In September, I was proud to join other business leaders in signing an open letter supporting the Deferred Action for Childhood Arrivals program and calling on Congress to pass the bipartisan Development, Relief, and Education for Alien Minors Act or similar legislation to provide young people raised in the U.S. a permanent solution.

We use innovative technologies to create new kinds of lasting value for consumers and businesses.

Innovation

Wells Fargo is a longtime leader in providing innovation to customers, and our pace of innovation increased in 2017. Today, under the leadership of Avid Modjtabai, we use innovative technologies to create new kinds of lasting value for consumers and businesses — and increased efficiency for our own internal operations. The year marked many successful technology rollouts, including card-free access for our 13,000 ATMs; Near-Field Communication, or NFC, at more than 50 percent of our ATMs to authenticate account holders for card-free access using a mobile wallet;

Zelle®[2], a fast, person-to-person payment option embedded in our mobile and online banking experiences; and new transaction-level receipt imaging on mobile devices for commercial customers.

These offerings are, in many cases, the first of their kind. And our customers are using them! For example, since March 2017, our customers have conducted more than 5 million card-free ATM transactions. And since June 2017, our customers have used *Zelle*® to transfer $10 billion in person-to-person payments.

We are enhancing our branch experience, allowing customers to authenticate at the teller line using a mobile app on an NFC-enabled mobile phone. By knowing who our customers are, bankers can have meaningful conversations focused on our customers' needs. In November, we launched *Intuitive Investor*℠ digital Wells Fargo Advisors[3] accounts for the next generation of investors. This offering combines innovative investing technology with phone-based advice, giving customers affordable access to personalized investment portfolios. Conveniently integrated with Wells Fargo's online banking services, *Intuitive Investor* provides features like automated account rebalancing as well as investment insights and strategy from the Wells Fargo Investment Institute[4].

We expect to introduce more exciting innovations in 2018. In the first quarter of this year, we plan to nationally launch our Online Mortgage Application, which combines the power of Wells Fargo data with a digital interface to create a "know me" experience for current Wells Fargo customers. It uses third-party-hosted technology that enables a customer to submit a credit application electronically and to append account documentation from Wells Fargo or other lenders. When a customer logs into the Online Mortgage Application, they won't be asked to provide certain information that we already have in our database.

We also plan to introduce Greenhouse℠ by Wells Fargo, a new, low-cost mobile banking experience with tools geared toward those who may find budgeting a challenge, are new to banking (such as students), or have several income sources (such as freelancers). Greenhouse is a combination of two accounts that work together: one for weekly spending, tied to a debit card, and one dedicated to saving and paying bills. Among its features are spending trends, personalized insights based on an artificial intelligence engine, and reminders to help consumers keep their spending on track to reach their financial goals. The experience is intuitive, personalized, and aligned to each applicant's individual situation.

Control Tower, an innovative customer experience, is also expected to launch in 2018 (page 20). With this digital banking feature, our customers will be able to view and manage the places where their Wells Fargo card and account information is stored, including personal finance websites, digital wallets, retail sites, and other third parties.

Another important area of innovation is how we are improving information security to protect our customers — from consumer

In 2017, our team members volunteered a record 2 million hours and contributed $85 million to 40,000 nonprofits.

Investment and insurance products: NOT FDIC-Insured/NO Bank Guarantee/MAY Lose Value

[2]Zelle and the Zelle-related marks and logos are property of Early Warning Services, LLC.

[3]Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company.

[4]Wells Fargo Investment Institute, Inc. is a registered investment adviser and wholly-owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

and commercial biometric options to leveraging artificial intelligence to help strengthen our risk management and fraud detection capabilities.

I am excited about the new kinds of value we are creating. The true value of innovation is when technology provides our customers more control and transparency to help them succeed financially.

Risk management

Managing risk is complex and challenging, and we have strengthened our risk framework substantially over the past year. With greater oversight of risk, we have created more consistency and have a better enterprise view of how we are managing risk. As we refine and build upon this work, we are expanding our efforts in 2018 with a focus on compliance and operational risk management, consistent with the Federal Reserve consent order. We want to ensure we have a fully integrated, cohesive, and companywide approach to risk management.

Our Audit Services function, led by Chief Auditor David Julian and reporting to the board of directors, continues to provide independent perspective, influence, and challenge on our governance, internal controls, and risk management.

The Conduct Management Office increases our oversight across the company. It seeks to ensure that all Wells Fargo team members and customers are protected and that we listen when they suggest the company might have fallen short.

We are building a strong, industry-leading compliance program within the Corporate Risk organization and have welcomed Mike Roemer, who has 27 years of financial services industry experience, as our new chief compliance officer. The enhancement of our compliance program will positively affect many other areas. We also welcomed Mark D'Arcy as chief operational risk officer and Sarah Dahlgren to the newly created role of head of regulatory relations. More than 2,000 external team members have been hired to risk roles to strengthen our capabilities during the past two years.

In 2017, we worked hard to strengthen our "raise your hand" culture. Team members know that they are expected to be risk managers in their own areas and report anything that doesn't seem right. An example is Lead Teller Ciarra Wagner of Omaha, Nebraska, who was suspicious when an older man — a noncustomer — wanted to make a large cash deposit into an acquaintance's account at Wells Fargo. Wagner alerted the branch service manager, who spoke with the man and learned that he feared he was the victim of a "lottery jackpot" scam. The man asked for Wells Fargo's help in contacting the police, and weeks later, he returned to thank the team for saving him from a painful loss — and to inquire about moving his accounts to Wells Fargo! I appreciate that our team cared, spotted a questionable situation, and helped resolve it. Our "raise your hand" culture also encourages team members to be vocal when they have ideas to make things better or identify areas that can be improved at Wells Fargo.

Corporate citizenship

We want to make every community in which we live and do business better — through the products and services we offer, the way we operate, our support of diversity and inclusion, and our many forms of philanthropy. We continue to be one of the largest corporate cash donors in the U.S., contributing $286.5 million to more than 14,500 nonprofits in 2017.

Following the passage of the federal Tax Cuts and Jobs Act last year, we expect to increase our annual philanthropic donations by 40 percent in 2018, with a longer-term goal of investing 2 percent of our after-tax profits for corporate philanthropy beginning in 2019.

In tandem with our corporate philanthropy, our work to improve communities is special because it is led by team members who devote their time and resources to causes they care about. At Wells Fargo, we are all corporate citizens, and our team members are how we make "better" happen wherever the Wells Fargo name appears.

In 2017, our team members volunteered a record 2 million hours and contributed $85 million to 40,000 nonprofits during our annual Community Support Campaign, recognized by United Way Worldwide as the largest workplace-giving campaign in the U.S. for the ninth consecutive year. And 91,000 team members — or about one-third of our company — participated in volunteer groups, including Volunteer Chapters, Green Teams, and Team Member Networks. As an example of this work, our team members taught money management skills to 227,000 children, veterans, seniors, and other people in their communities through the Wells Fargo Hands on Banking® program.

Following devastating hurricanes, wildfires, and other disasters, Wells Fargo donated more than $10.6 million to the American Red Cross and other local nonprofits to support recovery and rebuilding efforts, including $6.5 million to the WE Care fund, which provides financial grants to our team members who face disaster-related expenses or hardships. Our team members and board of directors personally contributed an additional $1.27 million to the WE Care fund. This was in addition to hundreds of hours of volunteer support for activities like blood drives, beach cleanups, fostering displaced pets, and other rebuilding efforts.

As a company, we focus and organize our corporate citizenship activities around three priorities: advancing diversity and social inclusion, creating economic opportunity in underserved communities, and accelerating the transition to a lower-carbon economy and healthier planet.

One of the most critical issues facing our world today is the lack of employment and opportunities for income mobility in economically disadvantaged areas. In fall 2017, students at Harris-Stowe State University in St. Louis began using the Wells Fargo Finance Education Center, an investment lab and mock trading floor that offers real-world experience in finance and banking. Our $250,000 gift to build and outfit the lab is part of a long-standing relationship between Wells Fargo Advisors and Harris-Stowe, the only historically black college in St. Louis. The finance lab is a promising way to both build a diverse workforce and increase high-paying career opportunities for students of color. Wells Fargo Advisors team members serve as guest lecturers at the Wells Fargo Finance Education Center and mentor Harris-Stowe students.

To advance economic recovery and revitalization on a much broader scale, we are expanding our support for small businesses and low- and moderate-income homebuyers. This includes a commitment to provide $100 million in capital, technical assistance, education, and other resources over the next three years to support the growth of diverse small businesses through the Wells Fargo Works *for Small Business*®: Diverse Community Capital program. We also plan to double our investment in Wells Fargo's NeighborhoodLIFT® program to $75 million in 2018.

In 2017, we announced a 10-year commitment to create at least 250,000 African American homeowners. It includes $60 billion in home loans and $15 million for homebuyer education and counseling initiatives. In our first year, we have helped more than 23,000 African American families become homeowners and invested $1.8 million to support homebuyer education and counseling. We marked the second year of our 10-year, $125 billion lending commitment to help increase Hispanic homeownership through our support of the National Association of Hispanic Real Estate Professionals' Hispanic Wealth Project. From 2016 through 2017, we helped more than 87,000 families become homeowners and provided about $2.8 million in funding for homebuyer education and counseling programs.

Like many of our customers, shareholders, and team members, we are concerned about climate change and other environmental challenges affecting our planet. We've launched the "Greener Every Day" campaign to educate and inspire our team members to join our environmental efforts by making simple changes in their behavior each day at home, work, and in the community. Our goal is for team members to make a total of 250,000 commitments to improve sustainability by 2020.

In 2017, we achieved a significant milestone by powering 100 percent of our global electricity needs with renewable energy. As one of the largest financers of renewable energy, energy efficiency, and clean technology in the U.S., we are committed to supporting new growth in the sector through product innovation and collaboration with public and private organizations to help speed the path to market for early-stage companies focused on sustainability.

I am very proud of the many ways we support members of the military, veterans, and their families — both as customers and as members of the Wells Fargo team. Since 2012, we have donated more than $100 million to support military service members, veterans, and their families through financial education, career transition, and housing initiatives. For the fourth year in a row, we sponsored a No Barriers Warriors to Summits team in 2017. This program assembles about a dozen veterans with disabilities and helps them overcome barriers and unleash their potential through a wilderness-based curriculum and experiences in challenging environments.

Within our offices, we continue to expand the Veterans Employment Transition program, which is focused on identifying and hiring veterans who are moving into the private workforce for internships with Wells Fargo Securities and other lines of business. And in 2017, we launched an ApprenticeshipUSA program, which allows eligible veterans to use GI Bill education benefits to earn a salary while acquiring high-value job skills.

I am deeply moved by the commitment our team members bring to bettering our communities, and I am pleased that we are able to support their work to help others.

Shareholder value

Our goal to create long-term shareholder value is the last on our list because each of the other five goals contributes to it. We recognize that you, our investors, have placed your trust in Wells Fargo, and we are focused on managing the company to achieve long-term value through a diversified business model, strong risk discipline, efficient execution, a solid balance sheet, and a world-class team. While the asset cap under the Federal Reserve consent order remains in place, I believe we will be able to continue to serve our customers, and the financial impact will be manageable.

Our financial performance in 2017 was solid, but we can and should do better. In 2017, our return on assets was 1.15 percent, and our return on equity was 11.35 percent.

Our capital and liquidity are strong, which is important to long-term shareholder value creation and provides flexibility in managing the company. We returned $14.5 billion to our shareholders through common stock dividends and net share repurchases in 2017, up 16 percent from 2016.

Our quarterly common stock dividend increased to 39 cents per share, and our net payout ratio[5] in 2017 was 72 percent. For the fourth straight year, we reduced our average number of diluted common shares outstanding, which were down 91 million shares from 2016.

We're on track with our expense initiatives, and we remain committed to our target of $4 billion in expense reductions by the end of 2019.

Our day-to-day efforts to transform Wells Fargo are the foundation of creating long-term success. I am optimistic that the investments we are making will allow us to serve our customers better and result in growth over the long term. We are committed to living up to our potential for you, our shareholders.

In closing

I want to express my appreciation to our board of directors for the knowledge, experience, and leadership they have shown during the past year. Special recognition is due to Steve Sanger, Cynthia Milligan, and Susan Swenson, who retired from the board at the end of 2017. Their contributions and service have helped our company immeasurably over the years.

During the past year, I have been asked many times, "Tim, why are you so optimistic?" My answer is, "How can I not be?" Wells Fargo is a strong company with a rich, 166-year history. We have overcome challenges many times during our history. We have a solid foundation, exceptional businesses, and an outstanding team. Our more than 260,000 team members are dedicated, talented, and committed — and, without a doubt, they are our most important resource. We are working every day to rebuild trust with our stakeholders, and I am confident that we will achieve our six goals. Thank you for placing your trust in Wells Fargo and for your support. Our commitment to you is unwavering as we continue our transformation into a better, stronger company.

Timothy J. Sloan
Chief Executive Officer and President
Wells Fargo & Company
February 15, 2018

[5] *Net payout ratio is the ratio of (i) common stock dividends and share repurchases less issuances and stock compensation-related items, divided by (ii) net income applicable to common stock.*

Once homeless, an Army veteran gets a fresh start in a house newly renovated to meet his needs over the long term.

The day Walter Moody met his new home, it was love at first sight.

From the front door to the open floor plan to the small yard out back, the redesigned, ranch-style house in the Raleigh neighborhood of Memphis, Tennessee, clearly charmed Moody. "When I first walked in here, I'll be honest with you: I didn't believe it," said the 55-year-old U.S. Army veteran. "Now I plan to be here till the day I die."

Moody received his mortgage-free home courtesy of Wells Fargo and United Housing Inc. as part of a nationwide home renovation competition called Home Today, Home Tomorrow. Inspired by the Home Matters movement and co-sponsored by AARP, the AARP Foundation, and the Wells Fargo Housing Foundation, the contest challenged architects to use universal design in the renovation of existing houses. The idea: to allow homeowners of many income levels to "age in place" and stay in their homes throughout all stages of their lives.

Home Matters' concept includes stair-free entrances, wide hallways, and barrier-free showers — all aimed at improving the owner's mental, emotional, and physical well-being.

"Wells Fargo has been on board with the idea since the inception of the Home Matters movement," said Martin Sundquist, head of the company's housing foundation, which worked with United Housing to provide the home. "We believe this is yet another success in our work with nonprofits to create stronger communities. We are proud to join United Housing and others to help make Mr. Moody's dream of homeownership a reality. I hope this collaboration inspires additional efforts to create more affordable and sustainable housing across the country."

Moody, who struggled with homelessness and unemployment for several years after his Army service, said a Catholic Charities program in Memphis helped him find a job and a new lease on life. It also worked with him as he applied for a renovated home through Home Today, Home Tomorrow.

Now he's happy to welcome his mother, Mary Moody, 77, for visits. Her own disabilities had made it difficult for her to navigate his previous apartment. "Now, when I see my mom walk in my house and able to get around, I know we can enjoy happy moments," he said. "It's going to be a real blessing. I'm happy."

Left: *Walter Moody at home in Memphis, Tennessee.*
Right: *Moody entertains friends in his backyard.*


"I plan to be here
till the day I die."
Finding a
forever
home

"We're just scratching the surface."

Making your phone a 'control tower'

A new Wells Fargo technology called Control Tower is designed to help customers manage their financial connections from one spot.

Ben Soccorsy saw eyes light up in the research lab as customers got a first look at a new digital banking technology being developed by Wells Fargo. It was the kind of moment his San Francisco team lives for — when those who will eventually *use* your new invention actually “get it.”

The moment came when the focus group participants, after seeing several demos and prototypes, realized Wells Fargo was onto something really good: a smartphone and online feature that gives customers control over their bank cards and accounts in new and different ways.

“Once they understood what this feature is and what it could do for them, it was a real moment of excitement,” said Soccorsy, head of the digital payments product team for Wells Fargo Virtual Channels. “Getting that kind of validation was a key part of our development journey — and we’re just scratching the surface of this concept’s potential.”

The technology, dubbed Control Tower, is designed to help customers securely manage their financial connections from one location inside the Wells Fargo mobile banking app and website. For example, customers who misplace their debit cards won’t have to click from website to website to update their payment method for things like online shopping, streaming video, and personal finance sites. Control Tower is designed to help them manage those from one place.

Wells Fargo expects to launch the feature in 2018. Customers will be able to see the places their Wells Fargo cards and accounts are connected — from personal finance apps and websites to digital wallets, retail merchant sites, and third parties.

“As our customers have discovered the convenience of online and mobile financial services, their digital lives have become more complex,” said Jim Smith, head of Wells Fargo Virtual Channels. “Currently, there isn’t one spot within a mobile banking app that lets customers control where their account information is connected. This new experience puts the customer in control and simplifies what too often is a fragmented digital experience. You’ll be able to view, organize, and manage your mobile wallets, recurring payments, devices, and other services that are electronically connected to your Wells Fargo cards and accounts.”

Soccorsy concluded, “One of the most exciting aspects of the financial services industry today is the use of technology to build stronger relationships with customers. Ultimately, Wells Fargo wants to simplify the way people connect to our services — whether at a branch, online, or through mobile, social media, or other channels. And we are thrilled about Control Tower, which we believe will be the first digital experience of its kind in the industry.”

Left: *Ben Soccorsy at the office in San Francisco.*
Right: *Soccorsy with his development team.*

A mom with a dream is forging ahead with plans to expand her inclusive preschool — aided by financial resources from Wells Fargo.

Prabha Sanjay had a big idea a decade ago and went all out to make it happen: open an inclusive preschool combining language immersion with Montessori teaching methods that focus on "the whole child." And she wasn't about to let financing hurdles block her path.

A former stay-at-home mom, she went back to college for an early childhood education degree when her kids went to middle school, then took a job at a preschool in Foster City, California. Next, she opened Odyssey Preschool as an in-home day care facility. After less than a year, word-of-mouth resulted in a waiting list of families eager for her services.

"When I was ready to expand into a commercial building space, many banks wouldn't even talk with my husband and me because of a loan rate modification on our home mortgage," she said. "But when we met with Paveli Roy, a business relationship manager at Wells Fargo, she saw the potential."

The first step, they determined, was to apply for a business secured credit card to pay for day-to-day business needs — and help strengthen her credit profile. Then they worked to refine her business plan, providing a path forward for her company's success and helping build the case for financing the business loan, despite her credit issues.

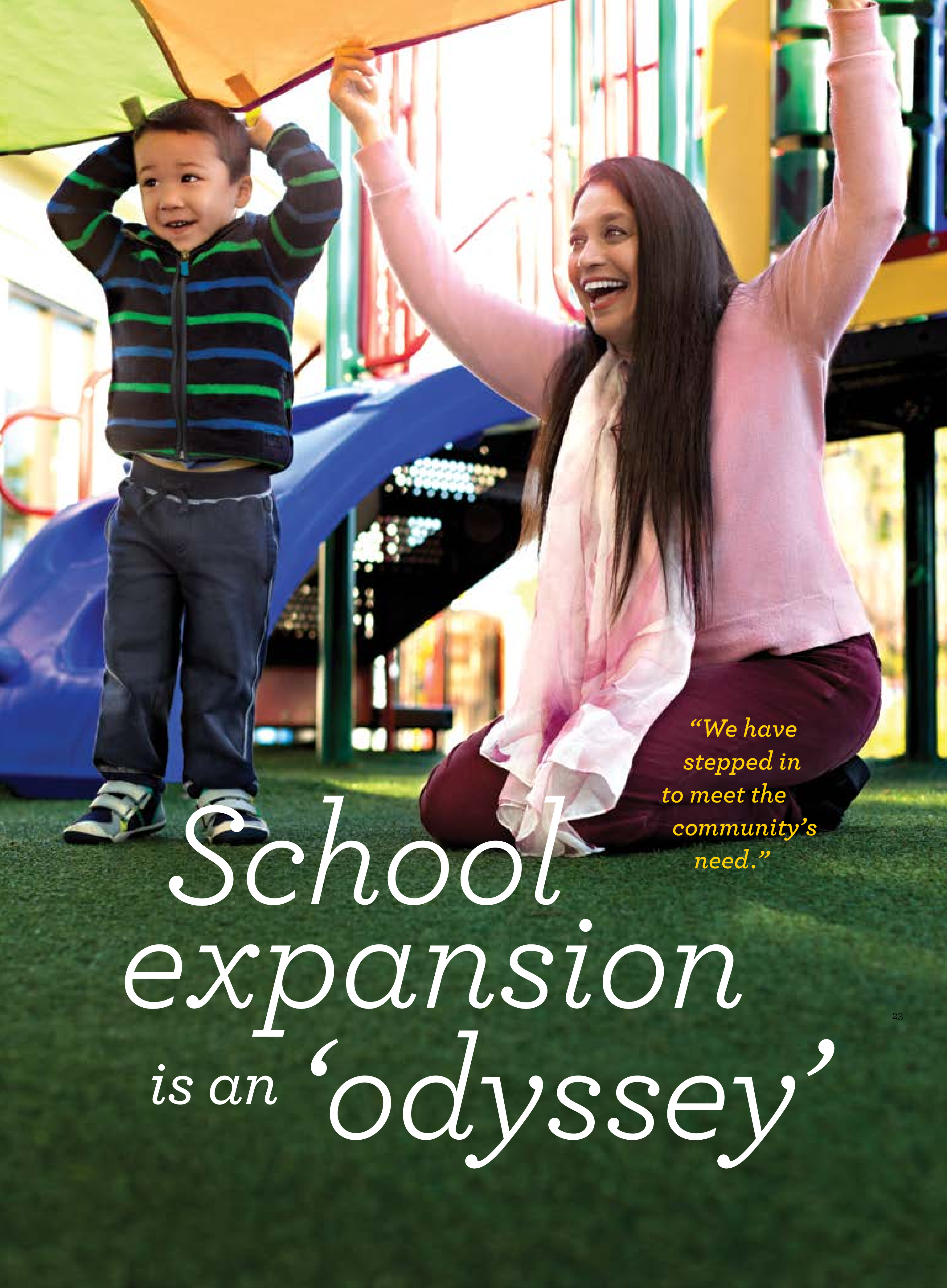
"When you meet with someone who is so passionate about what she does, that rubs off on you," the business relationship manager said. "I knew we could find a way to keep her small business journey moving forward."

She was approved for a $100,000 loan and moved Odyssey Preschool in 2009 to a building that could accommodate more students. Today, Odyssey Preschool cares for 130 children ages 18 months to 6 years and employs 20 teachers from China, India, Spain, and the U.S.

Soon, Odyssey Preschool will open a second location — in Palo Alto, California — that is expected to support more than 50 additional students.

"Being an immigrant myself," concluded the business owner, a native of Bangalore, India, "I realized there was a need to improve inclusion in preschools. Kids are like sponges, absorbing everything around them, which is why the environment they learn in is so important. And with a shortage of high-quality toddler care, it's extremely rewarding to know that we have stepped in to meet the community's need."

Left: *Prabha Sanjay with some of the preschoolers in her care.*
Right: *Prabha Sanjay at her preschool in Foster City, California.*



School expansion is an ‘odyssey’

“We have stepped in to meet the community’s need.”

"Sitting in that gondola ... was something I'd waited my whole life to do!"

It starts just by listening

At Wells Fargo branches, true conversations are helping customers achieve their dreams — such as saving up for the trip of a lifetime.

Alexandra Wilkinson's lifelong dream was to ride down the Grand Canal in Venice, Italy, in a gondola. She wasn't sure how to make it happen — until she had a conversation with Nicole Allegretto, a Wells Fargo personal banker in Palm Harbor, Florida.

Allegretto said, "What I try to do with all my customers is, first, listen to discover what's important to them. In Alex's case, it was clear that the answer was travel. And the more I heard, the more I wanted to help."

As the two chatted, they discussed Wilkinson's travel dream and considered several options before deciding to establish a small savings account as her "travel fund." Wilkinson, the owner of a social media management firm, supplemented her income and added that money to the fund.

"The most rewarding part was going to the branch every week and putting money in," Wilkinson said. "Every time I came in, Nicole was a huge cheerleader. The encouragement helped me have discipline, and it paid off."

Several months later, "Alex walked to my desk with the biggest smile on her face, a bounce in her step, and a receipt for the airline tickets she'd just purchased," Allegretto said. "I knew she had worked harder than ever to land new accounts so she could contribute to her travel fund. She also decided to rent out her home awhile and use the income to help the fund grow. And she discovered a work exchange program in which you agree to provide child care, cooking, and other services in exchange for room and board. This allowed her to cut the number of hotel stays she needed — making her travel money last even longer."

In the end, Wilkinson surpassed her savings goal and spent 53 days in Europe, visiting 19 locations in three countries — and, of course, riding the gondola in Venice. She said, "Sitting in that gondola, I started to cry a bit. It had been my dream and was something I'd waited my whole life to do!"

According to Allegretto, changes that Wells Fargo has instituted in bank branches are making meaningful customer conversations easier. Streamlined processes, she said, give team members more time to listen, empowering them to solve problems, reduce wait times, and improve overall customer service.

"If not for the way Wells Fargo is supporting the development of customer relationships," Allegretto said, "I might not have been a small part of helping Alex achieve her dream."

Left: *Alexandra Wilkinson in St. Petersburg, Florida.*
Right: *Wilkinson with Wells Fargo's Nicole Allegretto.*

Once a single shop in Manhattan, Goya Foods today is a worldwide manufacturer and distributor — and has remained a Wells Fargo customer for 40 years.

In 1936, Prudencio and Carolina Unanue opened a shop on Duane Street in Manhattan offering local Hispanic families authentic Spanish olives, olive oil, and sardines. Immigrants from Spain via Puerto Rico, the Unanues soon saw a need for all kinds of high-quality, fresh-tasting, Latin foods — and a much wider market.

The company they started, Goya Foods, is now run by grandson Bob Unanue and is currently “the largest Hispanic-owned food company in the United States and the premier source for authentic Latin cuisine,” he said. It employs more than 4,000 people worldwide and operates 26 corporate, manufacturing, and production facilities in the U.S., Puerto Rico, the Dominican Republic, and Spain. Consumers worldwide see the Goya name on more than 2,500 products sold at grocery stores and elsewhere.

“But we are not just a food company,” said Bob Unanue, Goya Foods president and CEO. “We have become a part of families and tables across the world. We have a tremendous sense of responsibility to our society ‘family,’ and as we have grown, our commitment grows even stronger.” In fact, Unanue refers to Goya Foods employees, communities, customers, suppliers, and business partners as “la gran familia Goya,” or “the great Goya family.”

For the past 40 years, Wells Fargo has been a part of that family. “Wells Fargo has supported our growth and expansion with financing and treasury services to support our evolving business requirements and opportunities,” Unanue said. “Our bankers have always been proactive in offering and delivering services to support Goya’s needs. They have demonstrated an interest in understanding our business and delivering high-quality service.”

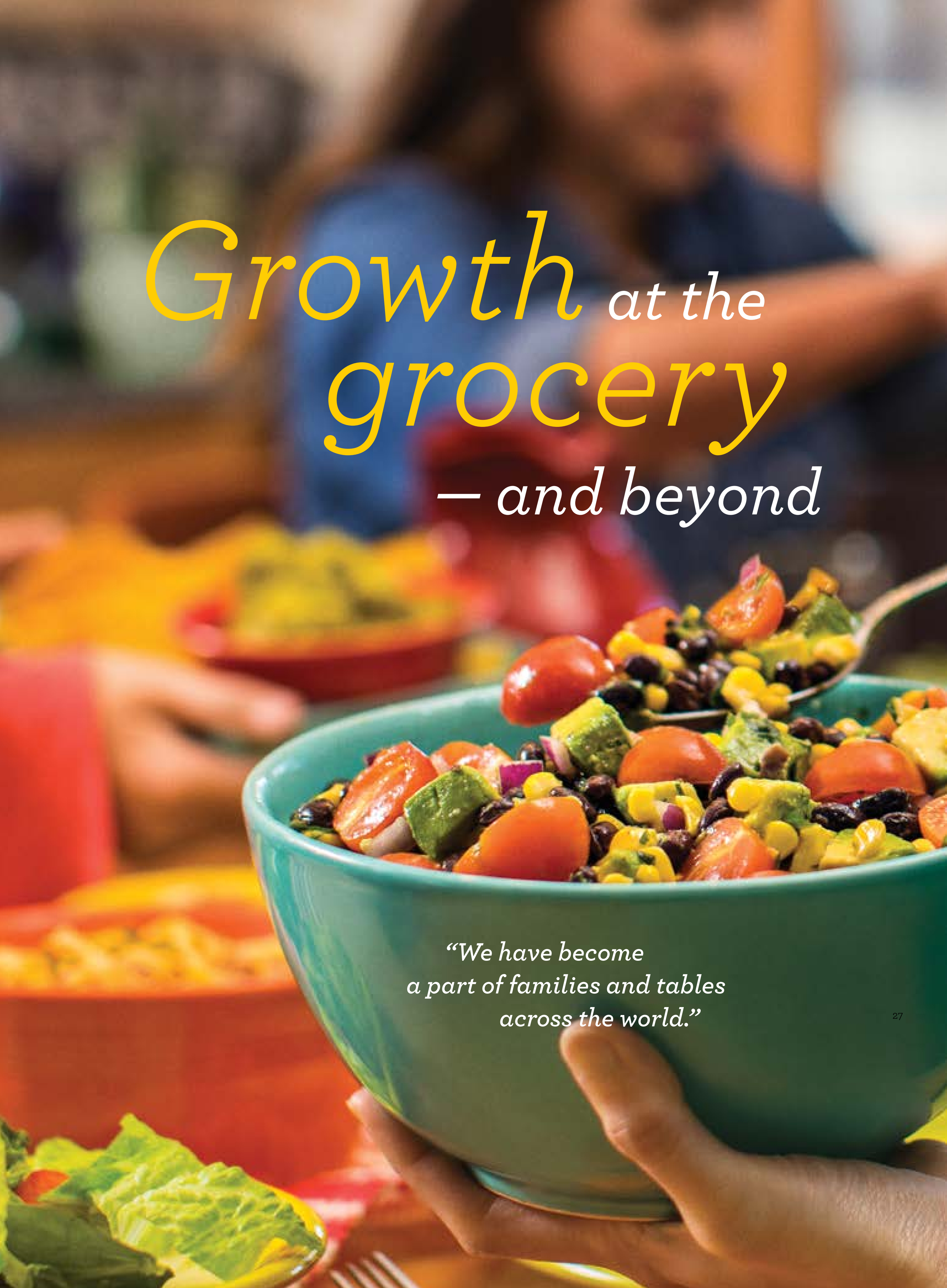
Toby Babeuf, regional vice president for Wells Fargo in Summit, New Jersey, said, “When you visit Goya, you’re humbled by the magnitude of its international operations and family-oriented management style.”

Wells Fargo’s service proved especially helpful as Goya Foods constructed a new headquarters recently in Jersey City, New Jersey, and expanded its manufacturing and distribution centers in Texas, California, and Georgia. And looking ahead, Unanue said, Goya Foods will continue to look at new and evolving distribution channels and growth through acquisition, joint ventures, and alliances.

Unanue concluded, “The story of Goya is as much about the importance of family and values as it is about achieving the American dream and helping to cultivate the Latin culture in the United States. Our commitment to the community is a core value and something we value in companies like Wells Fargo that we do business with. We look forward to our continued collaboration for many years to come.”

Left: *Goya Foods products are a mainstay ingredient in Latin cuisine.*
Right: *A meal prepared with Goya Foods products.*

Growth at the grocery — and beyond



"We have become a part of families and tables across the world."

"This is love money.
This is your mother."

Investments are a *mother's gift*

Careful planning helped provide for a son after tragedy took his mom's life.

Ron and Tricia Kephart of Laurie, Missouri, were devastated a decade ago when they got the phone call no parents want to receive.

Their daughter, Rhonda Swanigan, had been killed in an accident while riding as a passenger in someone else's car. The loss thrust them into an unfamiliar world of court hearings, legal settlements, and financial concerns as they stepped in to become legal guardians of their daughter's 8-year-old son, Bryce Kephart.

Fortunately, "Rhonda had made some good preparations," said Tricia Kephart. Specifically, Swanigan had life insurance. With the proceeds from that and a subsequent legal settlement, the Kepharts headed to see Patrick Rowland, a branch manager at Wells Fargo Advisors.

"We knew Bryce needed professional advice regarding his financial assets for when Grandmother and Grandpa aren't there one day," Ron Kephart said.

They used the Envision® investment planning process to help develop a strategy for Bryce's assets. Rowland helped them navigate the interactive tool, which adjusts to market moves and changing conditions so customers can see the potential impact on their finances now and in the future.

As Bryce grew, his grandparents taught him about money so he'd be ready at age 18 to take the reins of the account as its legal owner. He is now a freshman at Missouri State University.

Rowland said, "The Kepharts had done a great job both raising Bryce and talking to him about money and preparing for the future. Ultimately, Bryce and I developed a plan that sought to protect and grow his assets to help him meet his goal of going to college — and perhaps, one day, starting his own business."

Tricia Kephart concluded, "I tell Bryce all the time about his portfolio, 'This is love money. This is your mother. You need to remember that.' And he has. We're very proud of him!"

Left: *Bryce Kephart on campus at Missouri State University.*
Right: *Kephart with grandparents Ron and Tricia Kephart.*

With the help of Wells Fargo and a local nonprofit, a first-time restaurant owner brings fresh and healthy eating options to her reservation.

Where can you get a salad or fresh fruit smoothie on the Colville Indian Reservation in Washington state?

Only a year ago, you couldn't. But now that local entrepreneur Theresa Desautel has opened the Red Willow Café at the Colville Tribal Government Center in Nespelem, Washington, those healthy options are readily available.

The road to restaurateur was a bit of a winding one for Desautel, who grew up on the reservation but left to follow a career with a construction company in Spokane, Washington. She returned as an engineer working on the tribal government center. When the building was almost complete, she said, she walked through its empty restaurant and kitchen space and thought, "I could totally pull this off. I think I could do this!"

After winning the contract to open a restaurant, she turned to the Northwest Native Development Fund for help. The nonprofit organization is a Community Development Financial Institution, or CDFI, that lends to underserved Native American businesses and communities in Washington. "I didn't have enough cash for the initial food order, equipment, and payroll," she said, "and they helped me adjust my business plan and provided the assistance I needed until I got the loan. I couldn't have done it without them."

Wells Fargo supports the fund (and 55 other CDFIs nationwide) as part of the Wells Fargo Works *for Small Business*®: Diverse Community Capital program. Since 2015, Wells Fargo has awarded more than $55 million to CDFIs to help launch new businesses and grow existing ones — all with the goals of creating jobs, building wealth, and strengthening communities.

Connie Smith, manager of the Diverse Community Capital program, said, "We want to build the capacity of CDFIs like the Northwest Native Development Fund so they can provide more capital and technical assistance to the diverse small business owners they know best, and in the most culturally appropriate ways. As those businesses grow and build their credit, they can then become eligible for financing from more traditional sources."

In addition to Desautel's café, other recipients of Northwest Native Development Fund assistance include a day care center, a construction company that clears roads in the winter and fights wildfires the rest of the year, and a manufacturer of sweetgrass shampoos and conditioners.

Desautel concluded, "Like any small business owner, there are definitely some days when I think, 'What did I get myself into?' But I like owning my own business. I am the deciding factor in my own destiny. It's all up to me."

Left: *Theresa Desautel on the Colville Indian Reservation.*
Right: *Desautel at work in the Red Willow Café.*

Small business, big impact

"I like owning my own business. ... It's all up to me."

"We are helping people create their own luck."

Planting seeds for the next generation

The Hmong American Farmers Association helps preserve the "enduring spirit" of immigrant farmers by providing early guidance and investing for success.

Hmong refugees immigrating from Laos and Vietnam in the turbulent 1970s often turned to farming as their livelihood after arriving in the U.S. Although resources to ease their transition were hard to come by, many prospered.

Now, some 40 years later, nonprofit organizations like the Hmong American Farmers Association in St. Paul, Minnesota, are helping newcomers *and* working to create a generational investment for future farmers.

"Farming is at the heart of Hmong culture," said MayKao Fredericks, a Wells Fargo Community Relations consultant who grew up in a Hmong farming family in Spokane, Washington. "But they need help in the U.S. That's where the Hmong American Farmers Association comes in. It provides land tenure, exposure to markets other than farmers markets, and educational and financial support."

The association subleases its land to farmers and uses some plots for research and demonstrations to provide continuing education. More than 50 families and 250 individuals have benefited since the association started in 2011.

Wells Fargo supports the group through charitable giving designed to support minority-owned small businesses. "Wells Fargo was an early investor in the Hmong American Farmers Association," said Pakou Hang, executive director, "and that served as the foundation for all the successes that came after."

Hang described how the association helps: "A small-scale, new farmer working alone may not be able to purchase a large tract of land with cold storage and an irrigation system, or acquire a $75,000 tractor, or secure a contract with a university to sell 10,000 pounds of potatoes. But as part of a land or equipment cooperative, that is suddenly possible — and at a smaller risk and greater learning to the farmer. Moreover, it's not just the farmer that benefits, but the entire community."

Example: The association has a food hub that sells fresh fruits, vegetables, and flowers to 177 schools and 45 institutions, retailers, and restaurants.

"In essence," said Hang, "we are helping people create their own luck. That is the enduring spirit of the Hmong farmer, and it is the enduring spirit of the immigrants who built America."

Wells Fargo's Fredericks concluded, "I know the Hmong American Farmers Association is a change-maker for families like mine, who place agriculture, business acumen, and hard work at the forefront. It is improving the quality of life for Hmong farming families."

Left: *Janssen Hang, a farmer in St. Paul, Minnesota, with Pakou Hang, executive director of the Hmong American Farmers Association, or HAFA.*

Right: *Janssen Hang with Wells Fargo's MayKao Fredericks and HAFA's Pakou Hang.*

Learn more about everyone featured in this year's Annual Report at wellsfargo.com/stories

Operating Committee and Other Corporate Officers

Wells Fargo Operating Committee (left to right):
C. Allen Parker, Hope A. Hardison, David M. Julian, Perry G. Pelos, Jonathan G. Weiss, Timothy J. Sloan, Michael J. Loughlin, Mary T. Mack, John R. Shrewsberry, and Avid Modjtabai

Timothy J. Sloan
Chief Executive Officer and President *

Anthony R. Augliera
Corporate Secretary

Neal A. Blinde
Treasurer

John M. Campbell
Head of Investor Relations

Jon R. Campbell
Head of Corporate Responsibility & Community Relations

Hope A. Hardison
Chief Administrative Officer *

David M. Julian
Chief Auditor

Richard D. Levy
Controller *

Michael J. Loughlin
Chief Risk Officer *

Mary T. Mack
Head of Community Banking and Consumer Lending *

Avid Modjtabai
Head of Payments, Virtual Solutions and Innovation *

David Moskowitz
Head of Government Relations & Public Policy

C. Allen Parker
General Counsel *

Perry G. Pelos
Head of Wholesale Banking *

James H. Rowe
Head of Stakeholder Relations

John R. Shrewsberry
Chief Financial Officer *

Oscar Suris
Head of Corporate Communications

Jonathan G. Weiss
Head of Wealth and Investment Management *

* *"Executive officers" according to Securities and Exchange Commission rules.* | *As of February 15, 2018.*

Board of Directors

John D. Baker II 1, 2, 3
Executive Chairman and CEO
FRP Holdings, Inc.
(Real estate management)

John S. Chen 6
Executive Chairman and CEO
BlackBerry Limited
(Wireless communications)

Celeste A. Clark 2
Principal, Abraham Clark Consulting, LLC, and Retired Senior Vice President, Global Public Policy and External Relations and Chief Sustainability Officer
Kellogg Company
(Food manufacturing)

Theodore F. Craver, Jr. 1
Retired Chairman, President, and CEO
Edison International
(Energy)

Lloyd H. Dean 2, 5, 6
President and CEO
Dignity Health
(Healthcare)

Elizabeth A. Duke 3, 4, 5, 7
Chair
Wells Fargo & Company
Former member of the Federal Reserve Board of Governors
(U.S. regulatory agency)

Enrique Hernandez, Jr. 2, 4, 7
Chairman, President, and CEO
Inter-Con Security Systems, Inc.
(Security services)

Donald M. James 4, 5, 6
Retired Chairman
Vulcan Materials Company
(Construction materials)

Maria R. Morris 7
Retired Executive Vice President and Head of Global Employee Benefits business
MetLife, Inc.
(Health and life insurance)

Karen B. Peetz 4, 6, 7
Retired President
The Bank of New York Mellon Corporation
(Banking and financial services)

Federico F. Peña 1, 2, 5
Senior Advisor
Colorado Impact Fund
(Private equity)
Former U.S. Secretary of Energy and Former U.S. Secretary of Transportation

Juan A. Pujadas 3, 4, 7
Retired Principal
PricewaterhouseCoopers LLP, and Former Vice Chairman, Global Advisory Services, PwC International
(Professional services)

James H. Quigley 1, 3, 7
CEO Emeritus and Retired Partner
Deloitte
(Audit, tax, financial advisory)

Ronald L. Sargent 1, 5, 6
Retired Chairman and CEO
Staples, Inc.
(Office supply retailer)

Timothy J. Sloan
CEO and President
Wells Fargo & Company

Suzanne M. Vautrinot 2, 3, 7
President
Kilovolt Consulting, Inc.
(Cyber and technology consulting)
Major General and Commander
United States Air Force (retired)

Standing Committees
1. Audit and Examination 2. Corporate Responsibility 3. Credit 4. Finance 5. Governance and Nominating 6. Human Resources 7. Risk | As of February 15, 2018.

2017 Corporate Social Responsibility Performance Highlights

We are committed to delivering value to our shareholders and becoming a leader in corporate citizenship by advancing diversity and social inclusion, creating economic opportunity, and promoting environmental responsibility. Read more about our priorities, goals, and progress at wellsfargo.com/about/corporate-responsibility.

Investing in team members

Raised minimum wage to ***$15 per hour*** (effective March 2018) and added ***four new paid holidays*** for U.S. team members.

Supporting communities

Invested ***$286.5 million*** and volunteered ***2+ million*** hours in nonprofits in 2017. Created ***15,800+ homeowners*** in 57 communities through LIFT programs since 2012.

Advancing diversity and social inclusion

Awarded ***$4.6 million through diverse scholarship programs***, increasing access to education and employment opportunities. Hired ***1,400 military veterans***.

Accelerating clean technology

Donated ***$6 million to advance clean tech and innovation***. Financed more than ***$12 billion in renewable energy*** and other sustainable businesses.

Empowering diverse businesses

Provided ***$55 million*** in grants and capital to grow diverse small businesses since 2015. Spent more than ***$1 billion with diverse suppliers (4th year)***.

Reducing our operational impact

Met ***100% of our electricity needs with renewable energy***. Achieved LEED® certification for ***25%*** of total square footage in buildings.*

Data for January 1, 2017-December 31, 2017, unless otherwise noted.

**As of 3Q 2017.*

Wells Fargo & Company 2017 Financial Report

Financial Review

Controls and Procedures

Financial Statements

Notes to Financial Statements

This Annual Report, including the Financial Review and the Financial Statements and related Notes, contains forward-looking statements, which may include forecasts of our financial results and condition, expectations for our operations and business, and our assumptions for those forecasts and expectations. Do not unduly rely on forward-looking statements. Actual results may differ materially from our forward-looking statements due to several factors. Factors that could cause our actual results to differ materially from our forward-looking statements are described in this Report, including in the "Forward-Looking Statements" and "Risk Factors" sections, and in the "Regulation and Supervision" section of our Annual Report on Form 10-K for the year ended December 31, 2017 (2017 Form 10-K).

When we refer to "Wells Fargo," "the Company," "we," "our," or "us" in this Report, we mean Wells Fargo & Company and Subsidiaries (consolidated). When we refer to the "Parent," we mean Wells Fargo & Company. When we refer to "legacy Wells Fargo," we mean Wells Fargo excluding Wachovia Corporation (Wachovia). See the Glossary of Acronyms for terms used throughout this Report.

Financial Review

Overview

Wells Fargo & Company is a diversified, community-based financial services company with $2.0 trillion in assets. Founded in 1852 and headquartered in San Francisco, we provide banking, investments, mortgage, and consumer and commercial finance through more than 8,300 locations, 13,000 ATMs, digital (online, mobile and social), and contact centers (phone, email and correspondence), and we have offices in 42 countries and territories to support customers who conduct business in the global economy. With approximately 263,000 active, full-time equivalent team members, we serve one in three households in the United States and ranked No. 25 on *Fortune's* 2017 rankings of America's largest corporations. We ranked third in assets and in the market value of our common stock among all U.S. banks at December 31, 2017.

We use our *Vision, Values and Goals* to guide us toward growth and success. Our vision is to satisfy our customers' financial needs and help them succeed financially. We aspire to create deep and enduring relationships with our customers by providing them with an exceptional experience and by understanding their needs and delivering the most relevant products, services, advice, and guidance.

We have five primary values, which are based on our vision and guide the actions we take. First, we place customers at the center of everything we do. We want to exceed customer expectations and build relationships that last a lifetime. Second, we value and support our people as a competitive advantage and strive to attract, develop, motivate, and retain the best team members. Third, we strive for the highest ethical standards of integrity, transparency, and principled performance. Fourth, we value and promote diversity and inclusion in all aspects of business and at all levels. Fifth, we look to each of our team members to be a leader in establishing, sharing, and communicating our vision for our customers, communities, team members, and shareholders. In addition to our five primary values, one of our key day-to-day priorities is to make risk management a competitive advantage by working hard to ensure that appropriate controls are in place to reduce risks to our customers, maintain and increase our competitive market position, and protect Wells Fargo's long-term safety, soundness, and reputation.

In keeping with our primary values and risk management priorities, we have six long-term goals for the Company, which entail becoming the financial services leader in the following areas:

- Customer service and advice – provide exceptional service and guidance to our customers to help them succeed financially.
- Team member engagement – be a company where people feel included, valued, and supported; everyone is respected; and we work as a team.
- Innovation – create lasting value for our customers and increased efficiency for our operations through innovative thinking, industry-leading technology, and a willingness to test and learn.
- Risk management – set the global standard in managing all forms of risk.
- Corporate citizenship – make a positive contribution to communities through philanthropy, advancing diversity and inclusion, creating economic opportunity, and promoting environmental sustainability.
- Shareholder value – deliver long-term value for shareholders.

Over the past year and a half, our Board of Directors (Board) has taken, and continues to take, actions to enhance Board oversight and governance. These actions, many of which reflected results from the Board's 2017 self-assessment, which was facilitated by a third party, and the feedback we received from our shareholders and other stakeholders, included:

- Separating the roles of Chairman of the Board and Chief Executive Officer.
- Amending Wells Fargo's By-Laws to require that the Chairman be an independent director.
- Electing Elizabeth A. "Betsy" Duke as our new independent Board Chair, effective January 1, 2018.
- Electing six new independent directors, including directors with financial services, risk management, regulatory, technology, human capital management, social responsibility, and other relevant experience, with five directors retiring in 2017.
- Making changes to the leadership and composition of key Board committees, including appointing new chairs of the Board's Risk Committee and Governance and Nominating Committee.
- Amending Board committee charters and working with management to improve reporting to the Board in order to enhance the Board's risk oversight.

As previously announced, the Board's refreshment process will continue with director retirements in 2018. As has been our practice, we will continue our engagement efforts with our shareholders and other stakeholders while the Board maintains its focus on enhancing oversight and governance.

Federal Reserve Board Consent Order Regarding Governance Oversight and Compliance and Operational Risk Management

On February 2, 2018, the Company entered into a consent order with the Board of Governors of the Federal Reserve System (FRB), which requires the Company to submit to the FRB within 60 days of the date of the consent order plans to further enhance the Board's governance oversight and the Company's compliance and operational risk management. The consent order also requires third-party reviews related to the adoption and implementation of such plans by September 30, 2018. Until these third-party reviews are complete and the plans are approved and implemented to the satisfaction of the FRB, the Company's total consolidated assets will be limited to the level as of December 31, 2017. Compliance with this asset cap will be measured on a two-quarter daily average basis to allow for management of temporary fluctuations. Once the asset cap limitation is removed, a second third-party review must be conducted to assess the efficacy and sustainability of the improvements.

The Company may be subject to further actions, including the imposition of consent orders or similar regulatory agreements or civil money penalties, by other federal regulators regarding similar issues, including the Company's risk management policies and procedures.

Sales Practices Matters

As we have previously reported, in September 2016 we announced settlements with the Consumer Financial Protection Bureau (CFPB), the Office of the Comptroller of the Currency (OCC), and the Office of the Los Angeles City Attorney, and entered into consent orders with the CFPB and the OCC, in connection with allegations that some of our retail customers received products and services they did not request. As a result, it remains our top priority to rebuild trust through a comprehensive action plan that includes making things right for our customers, team members, and other stakeholders, and building a better Company for the future.

The job of rebuilding trust in Wells Fargo is a long-term effort – one requiring our commitment and perseverance. We have in place a specific action plan focused on reaching out to stakeholders who may have been affected by improper retail banking sales practices, including our communities, our customers, our regulators, our team members, and our investors.

Our priority of rebuilding trust has included numerous actions focused on identifying potential financial harm and customer remediation. The Board and management are conducting company-wide reviews of sales practices issues. These reviews are ongoing. In August 2017, a third-party consulting firm completed an expanded data-driven review of retail banking accounts opened from January 2009 to September 2016 to identify financial harm stemming from potentially unauthorized accounts. We are providing customer remediation based on the expanded account analysis.

For additional information regarding sales practices matters, including related legal matters, see the "Risk Factors" section and Note 15 (Legal Actions) to Financial Statements in this Report.

Additional Efforts to Rebuild Trust

Our priority of rebuilding trust has also included an effort to identify other areas or instances where customers may have experienced financial harm. We are working with our regulatory agencies in this effort. As part of this effort, we are focused on the following key areas:

- **Automobile Lending Business** Practices concerning the origination, servicing, and/or collection of consumer automobile loans, including related insurance products. For example:
  - In July 2017, the Company announced a plan to remediate customers who may have been financially harmed due to issues related to automobile collateral protection insurance (CPI) policies purchased through a third-party vendor on their behalf. The practice of placing CPI was discontinued by the Company on September 30, 2016. Commencing in August 2017, the Company began sending refund checks and/or letters to affected customers through which they may claim or otherwise receive remediation compensation for policies placed between October 15, 2005, and September 30, 2016. The Company currently estimates that it will provide approximately $145 million in cash remediation and $37 million in account adjustments under the plan. The amount of remediation may be affected as the Company continues to work with its regulators on the remediation plan.
  - The Company has identified certain issues related to the unused portion of guaranteed automobile protection waiver or insurance agreements between the dealer and, by assignment, the lender, which may result in refunds to customers in certain states.
- **Mortgage Interest Rate Lock Extensions** In October 2017, the Company announced plans to reach out to all home lending customers who paid fees for mortgage rate lock extensions requested from September 16, 2013, through February 28, 2017, and to provide refunds, with interest, to customers who believe they should not have paid those fees. The plan to issue refunds follows an internal review that determined a rate lock extension policy implemented in September 2013 was, at times, not consistently applied, resulting in some borrowers being charged fees in cases where the Company was primarily responsible for the delays that made the extensions necessary. Effective March 1, 2017, the Company changed how it manages the mortgage rate lock extension process by establishing a centralized review team that reviews all rate lock extension requests for consistent application of the policy. Although a total of approximately $98 million in rate lock extension fees was assessed on approximately 110,000 accounts during the period in question, the Company believes that the amount ultimately refunded likely will be lower because a substantial number of those fees were appropriately charged under its policy, not all of the fees assessed were actually paid, and some fees already have been refunded.
- **Add-on Products** Practices related to certain consumer "add-on" products, including identity theft and debt protection products that were subject to an OCC consent order entered into in June 2015. Based on our ongoing review of "add-on" products across the Company, we

expect remediation will be required.

- **Consumer Deposit Account Freezing/Closing** Procedures regarding the freezing (and, in many cases, closing) of consumer deposit accounts after the Company detected suspected fraudulent activity (by third-parties or account holders) that affected those accounts.
- **Review of Certain Activities Within Wealth and Investment Management** A review of certain activities within Wealth and Investment Management (WIM) being conducted by the Board, in response to inquiries from federal government agencies, is assessing whether there have been inappropriate referrals or recommendations, including with respect to rollovers for 401(k) plan participants, certain alternative investments, or referrals of brokerage customers to the Company's investment and fiduciary services business. The review is in its preliminary stages.
- **Fiduciary and Custody Account Fee Calculations** The Company is reviewing fee calculations within certain fiduciary and custody accounts in its investment and fiduciary services business, which is part of the wealth management business in WIM. The Company has determined that there have been instances of incorrect fees being applied to certain assets and accounts, resulting in overcharges. These issues include the incorrect set-up and maintenance in the system of record of the values associated with certain assets. Systems, operations, and account-level reviews are underway to determine the extent of any assets and accounts affected, and root cause analyses are being performed with the assistance of third parties. The review is in its preliminary stages and is focused initially on assets that are not publicly traded.
- **Foreign Exchange Business** The Company is reviewing policies, practices, and procedures in its foreign exchange (FX) business. The Company is also responding to inquiries from government agencies in connection with their reviews of certain aspects of our FX business.

To the extent issues are identified, we will continue to assess any customer harm and provide remediation as appropriate. This effort to identify other instances in which customers may have experienced harm is ongoing, and it is possible that we may identify other areas of potential concern. For more information, including related legal and regulatory risk, see the "Risk Factors" section and Note 15 (Legal Actions) to Financial Statements in this Report.

Financial Performance

In 2017, we generated $22.2 billion of net income and diluted earnings per common share (EPS) of $4.10, compared with $21.9 billion of net income and EPS of $3.99 for 2016. We grew average loans and deposits compared with 2016, increased our capital and liquidity levels, and rewarded our shareholders by increasing our dividend and continuing to repurchase shares of our common stock. Our achievements during 2017 continued to demonstrate the benefit of our diversified business model and our ability to perform well in a challenging environment. Noteworthy financial performance items for 2017 (compared with 2016) included:

- revenue of $88.4 billion, up from $88.3 billion, which included net interest income of $49.6 billion, up $1.8 billion, or 4%;
- a $3.4 billion after-tax benefit, or $0.67 per share, to net income in 2017 from the impact of the Tax Cuts & Jobs Act (Tax Act) passed in December 2017. The impact included a tax benefit from the re-measurement of net deferred income tax liabilities, partially offset by the tax cost of a deemed repatriation of undistributed foreign earnings and the impact of adjustments related to leveraged leases, low income housing investments, and tax-advantaged renewable energy investments.
- total loans of $956.8 billion, down 1%;
- deposit growth, with total deposits of $1.3 trillion, up $29.9 billion, or 2%;
- strong credit performance as our net charge-off ratio was 31 basis points of average loans down from 37 basis points;
- nonaccrual loans of $8.0 billion, down $2.3 billion, or 23%; and
- returning $14.5 billion in capital to our shareholders through increased common stock dividends and additional net share repurchases.

Table 1 presents a six year summary of selected financial data and Table 2 presents selected ratios and per common share data.

Balance Sheet and Liquidity

Our balance sheet grew 1% in 2017 to $2.0 trillion, as we increased our liquidity position, held more capital and continued to experience solid credit quality. Cash and other short-term investments increased $9.2 billion from December 31, 2016, reflecting lower loan balances and growth in deposits. Investment securities grew $8.5 billion, or 2%, from December 31, 2016. Our loan portfolio declined $10.8 billion from December 31, 2016. Growth in commercial and industrial and real estate 1-4 family first mortgage loans was more than offset by declines in commercial real estate mortgage, real estate 1-4 family junior lien mortgage and automobile loans.

Deposits at December 31, 2017, were up $29.9 billion, or 2%, from 2016. This increase reflected growth across our commercial, consumer and small business banking deposits. Our average deposit cost increased 12 basis points from a year ago driven by an increase in commercial and wealth and investment management deposit rates.

Credit Quality

Credit quality remained solid in 2017, driven by continued strong performance in the commercial and consumer real estate portfolios. Performance in several of our commercial and consumer loan portfolios remained near historically low loss levels and reflected our long-term risk focus. Net charge-offs of $2.9 billion were 0.31% of average loans, compared with $3.5 billion and 0.37%, respectively, from a year ago. Net losses in our commercial portfolio were $446 million, or 9 basis points of average loans, in 2017, compared with $1.1 billion, or 22 basis points, in 2016. Our commercial real estate portfolios were in a net recovery position for each quarter of the last five years, reflecting our conservative risk discipline and improved market conditions.

Net consumer losses increased to 55 basis points in 2017 from 53 basis points in 2016. Losses on our consumer real estate portfolios declined $343 million to a net recovery position from a year ago. The consumer loss levels reflected increased losses in our credit card, automobile, and other revolving and installment loan portfolios, partially offset by the benefit of the improving housing market and our continued focus on originating high quality loans. As of December 31, 2017, approximately 79% of our real estate 1-4 family first lien mortgage portfolio was originated after 2008, when new underwriting standards were implemented.

The allowance for credit losses of $12.0 billion at December 31, 2017, was down $580 million compared with the prior year. Our provision for credit losses in 2017 was $2.5 billion compared with $3.8 billion a year ago reflecting a release of $400 million in the allowance for credit losses, compared with a build of $250 million in 2016. The build in 2016 was primarily due to deterioration in the oil and gas portfolio, while the release in 2017 was due to strong underlying credit performance.

Nonperforming assets (NPAs) at the end of 2017 were down $2.7 billion, or 24%, from the end of 2016. Nonaccrual loans declined $2.3 billion from the prior year end while foreclosed assets were down $336 million from 2016.

Capital

Our capital levels remained strong in 2017 with total equity increasing to $208.1 billion at December 31, 2017, up $7.6 billion from the prior year. We returned $14.5 billion to shareholders in 2017 ($12.5 billion in 2016) through common stock dividends and net share repurchases, and our net payout ratio (which is the ratio of (i) common stock dividends and share repurchases less issuances and stock compensation-related items, divided by (ii) net income applicable to common stock) was 70%. During 2017 we increased our quarterly common stock dividend from $0.38 to $0.39 per share. Our common shares outstanding declined by 124.5 million shares as we continued to reduce our common share count through the repurchase of 196.5 million common shares during the year. We entered into a $1 billion forward repurchase contract with an unrelated third party in January 2018 that settled in February 2018 for 15.7 million shares. We also entered into a $600 million forward repurchase contract with an unrelated third party in February 2018 that is expected to settle in second quarter 2018 for approximately 11 million shares. We expect our share count to continue to decline in 2018 as a result of anticipated net share repurchases.

We believe an important measure of our capital strength is the Common Equity Tier 1 ratio on a fully phased-in basis, which was 11.98% as of December 31, 2017, compared with 10.77% a year ago. Likewise, our other regulatory capital ratios remained strong. See the "Capital Management" section in this Report for more information regarding our capital, including the calculation of our regulatory capital amounts.

Table 1: Six-Year Summary of Selected Financial Data

(in millions, except per share amounts)	2017	2016	2015	2014	2013	2012	% Change 2017/ 2016	Five-year compound growth rate
Income statement								
Net interest income	$ 49,557	47,754	45,301	43,527	42,800	43,230	4%	3
Noninterest income	38,832	40,513	40,756	40,820	40,980	42,856	(4)	(2)
Revenue	88,389	88,267	86,057	84,347	83,780	86,086	—	1
Provision for credit losses	2,528	3,770	2,442	1,395	2,309	7,217	(33)	(19)
Noninterest expense	58,484	52,377	49,974	49,037	48,842	50,398	12	3
Net income before noncontrolling interests	22,460	22,045	23,276	23,608	22,224	19,368	2	3
Less: Net income from noncontrolling interests	277	107	382	551	346	471	159	(10)
Wells Fargo net income	22,183	21,938	22,894	23,057	21,878	18,897	1	3
Earnings per common share	4.14	4.03	4.18	4.17	3.95	3.40	3	4
Diluted earnings per common share	4.10	3.99	4.12	4.10	3.89	3.36	3	4
Dividends declared per common share	1.540	1.515	1.475	1.350	1.150	0.880	2	12
Balance sheet (at year end)								
Investment securities	$ 416,420	407,947	347,555	312,925	264,353	235,199	2%	12
Loans	956,770	967,604	916,559	862,551	822,286	798,351	(1)	4
Allowance for loan losses	11,004	11,419	11,545	12,319	14,502	17,060	(4)	(8)
Goodwill	26,587	26,693	25,529	25,705	25,637	25,637	—	1
Assets	1,951,757	1,930,115	1,787,632	1,687,155	1,523,502	1,421,746	1	7
Deposits	1,335,991	1,306,079	1,223,312	1,168,310	1,079,177	1,002,835	2	6
Long-term debt	225,020	255,077	199,536	183,943	152,998	127,379	(12)	12
Wells Fargo stockholders' equity	206,936	199,581	192,998	184,394	170,142	157,554	4	6
Noncontrolling interests	1,143	916	893	868	866	1,357	25	(3)
Total equity	208,079	200,497	193,891	185,262	171,008	158,911	4	6

Table 2: Ratios and Per Common Share Data

		Year ended December 31,	
	2017	2016	2015
Profitability ratios			
Wells Fargo net income to average assets (ROA)	**1.15%**	1.16	1.31
Wells Fargo net income applicable to common stock to average Wells Fargo common stockholders' equity (ROE)	**11.35**	11.49	12.60
Return on average tangible common equity (ROTCE) (1)	**13.55**	13.85	15.17
Efficiency ratio (2)	**66.2**	59.3	58.1
Capital ratios (3)			
At year end:			
Wells Fargo common stockholders' equity to assets	**9.38**	9.14	9.62
Total equity to assets	**10.66**	10.39	10.85
Risk-based capital (4):			
Common Equity Tier 1	**12.28**	11.13	11.07
Tier 1 capital	**14.14**	12.82	12.63
Total capital	**17.46**	16.04	15.45
Tier 1 leverage	**9.35**	8.95	9.37
Average balances:			
Average Wells Fargo common stockholders' equity to average assets	**9.37**	9.40	9.78
Average total equity to average assets	**10.64**	10.64	10.99
Per common share data			
Dividend payout (5)	**37.6**	38.0	35.8
Book value (6)	**$ 37.44**	35.18	33.78
Market price (7)			
High	**62.24**	58.02	58.77
Low	**49.28**	43.55	47.75
Year end	**60.67**	55.11	54.36

(1) Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, and goodwill and certain identifiable intangible assets (including goodwill and intangible assets associated with certain of our nonmarketable equity investments but excluding mortgage servicing rights), net of applicable deferred taxes. The methodology of determining tangible common equity may differ among companies. Management believes that return on average tangible common equity, which utilizes tangible common equity, is a useful financial measure because it enables investors and others to assess the Company's use of equity. For additional information, including a corresponding reconciliation to GAAP financial measures, see the "Capital Management – Tangible Common Equity" section in this Report.
(2) The efficiency ratio is noninterest expense divided by total revenue (net interest income and noninterest income).
(3) See the "Capital Management" section and Note 27 (Regulatory and Agency Capital Requirements) to Financial Statements in this Report for additional information.
(4) The risk-based capital ratios presented at December 31, 2017, 2016, and 2015 were calculated under the lower of Standardized or Advanced Approach determined pursuant to Basel III with Transition Requirements. The risk-based capital ratios were all lower under the Standardized Approach at December 31, 2017. The total capital ratio was lower under the Advanced Approach and the other ratios were lower under the Standardized Approach at both December 31, 2016 and 2015.
(5) Dividend payout ratio is dividends declared per common share as a percentage of diluted earnings per common share.
(6) Book value per common share is common stockholders' equity divided by common shares outstanding.
(7) Based on daily prices reported on the New York Stock Exchange Composite Transaction Reporting System.

Earnings Performance

Wells Fargo net income for 2017 was $22.2 billion ($4.10 diluted earnings per common share), compared with $21.9 billion ($3.99 diluted per share) for 2016 and $22.9 billion ($4.12 diluted per share) for 2015. Our financial performance in 2017 benefited from a $1.8 billion increase in net interest income, a $1.2 billion decrease in our provision for credit losses, and a $5.2 billion decrease in income tax expense (of which $3.7 billion resulted from the net benefit of adjustments due to the Tax Act), partially offset by a $1.7 billion decrease in noninterest income and a $6.1 billion increase in noninterest expense.

Revenue, the sum of net interest income and noninterest income, was $88.4 billion in 2017, compared with $88.3 billion in 2016 and $86.1 billion in 2015. The increase in revenue for 2017 compared with 2016 was predominantly due to an increase in net interest income, reflecting increases in interest income from loans, trading assets and investment securities, partially offset by higher long-term debt and deposit interest expense. Our diversified sources of revenue generated by our businesses continued to be balanced between net interest income and noninterest income. In 2017, net interest income of $49.6 billion represented 56% of revenue, compared with $47.8 billion (54%) in 2016 and $45.3 billion (53%) in 2015. Table 3 presents the components of revenue and noninterest expense as a percentage of revenue for year-over-year results.

See later in this section for discussions of net interest income, noninterest income and noninterest expense.

Table 3: Net Interest Income, Noninterest Income and Noninterest Expense as a Percentage of Revenue

	Year ended December 31,					
(in millions)	**2017**	**% of revenue**	2016	% of revenue	2015	% of revenue
Interest income (on a taxable-equivalent basis)						
Trading assets	**$ 2,982**	**3%**	$ 2,553	3%	$ 2,010	2%
Investment securities	**11,768**	**13**	10,316	11%	9,906	12
Mortgages held for sale (MHFS)	**786**	**1**	784	1	785	1
Loans held for sale (LHFS)	**12**	**—**	9	—	19	—
Loans	**41,551**	**47**	39,630	45	36,663	43
Other interest income	**3,134**	**4**	1,614	2	990	1
Total interest income (on a taxable-equivalent basis)	**60,233**	**68**	54,906	62	50,373	59
Interest expense (on a taxable-equivalent basis)						
Deposits	**3,013**	**3**	1,395	2	963	1
Short-term borrowings	**761**	**1**	333	—	64	—
Long-term debt	**5,157**	**6**	3,830	5	2,592	4
Other interest expense	**424**	**—**	354	—	357	—
Total interest expense (on a taxable-equivalent basis)	**9,355**	**11**	5,912	7	3,976	5
Net interest income (on a taxable-equivalent basis)	**50,878**	**57**	48,994	55	46,397	54
Taxable-equivalent adjustment	**(1,321)**	**(1)**	(1,240)	(1)	(1,096)	(1)
Net interest income (A)	**49,557**	**56**	47,754	54	45,301	53
Noninterest income						
Service charges on deposit accounts	**5,111**	**6**	5,372	6	5,168	6
Trust and investment fees (1)	**14,495**	**16**	14,243	16	14,468	16
Card fees	**3,960**	**4**	3,936	5	3,720	4
Other fees (1)	**3,557**	**4**	3,727	4	4,324	5
Mortgage banking (1)	**4,350**	**5**	6,096	7	6,501	7
Insurance	**1,049**	**1**	1,268	2	1,694	2
Net gains from trading activities	**1,053**	**1**	834	1	614	1
Net gains on debt securities	**479**	**1**	942	1	952	1
Net gains from equity investments	**1,268**	**1**	879	1	2,230	3
Lease income	**1,907**	**2**	1,927	2	621	1
Other	**1,603**	**2**	1,289	1	464	1
Total noninterest income (B)	**38,832**	**44**	40,513	46	40,756	47
Noninterest expense						
Salaries	**17,363**	**20**	16,552	19	15,883	19
Commission and incentive compensation	**10,442**	**12**	10,247	12	10,352	12
Employee benefits	**5,566**	**6**	5,094	6	4,446	5
Equipment	**2,237**	**3**	2,154	2	2,063	2
Net occupancy	**2,849**	**3**	2,855	3	2,886	3
Core deposit and other intangibles	**1,152**	**1**	1,192	1	1,246	1
FDIC and other deposit assessments	**1,287**	**1**	1,168	1	973	1
Operating losses	**5,492**	**6**	1,608	2	1,871	2
Outside professional services	**3,813**	**4**	3,138	4	2,665	3
Other (2)	**8,283**	**9**	8,369	9	7,589	10
Total noninterest expense	**58,484**	**66**	52,377	59	49,974	58
Revenue (A) + (B)	**$ 88,389**		$ 88,267		$ 86,057	

(1) See Table 7 – Noninterest Income in this Report for additional detail.
(2) See Table 8 – Noninterest Expense in this Report for additional detail.

Net Interest Income

Net interest income is the interest earned on debt securities, loans (including yield-related loan fees) and other interest-earning assets minus the interest paid on deposits, short-term borrowings and long-term debt. The net interest margin is the average yield on earning assets minus the average interest rate paid for deposits and our other sources of funding. Net interest income and the net interest margin are presented on a taxable-equivalent basis in Table 5 to consistently reflect income from taxable and tax-exempt loans and securities based on a 35% federal statutory tax rate.

While the Company believes that it has the ability to increase net interest income over time, net interest income and the net interest margin in any one period can be significantly affected by a variety of factors including the mix and overall size of our earning assets portfolio and the cost of funding those assets. In addition, some variable sources of interest income, such as resolutions from purchased credit-impaired (PCI) loans, loan fees and collection of interest on nonaccrual loans, can vary from period to period. Net interest income and net interest margin growth has been challenged during the prolonged low interest rate environment as higher yielding loans and securities have run off and have been replaced with lower yielding assets.

Net interest income on a taxable-equivalent basis was $50.9 billion in 2017, compared with $49.0 billion in 2016, and $46.4 billion in 2015. The net interest margin was 2.87% in 2017, up 1 basis point from 2.86% in 2016, and down 9 basis points from 2.95% in 2015. The increase in net interest income for 2017, compared with 2016, was driven by growth in earning assets and the benefit of higher interest rates, partially offset by growth and repricing of long-term debt. Deposit interest expense was also higher, largely due to an increase in Wholesale and Wealth and Investment Management (WIM) deposit pricing resulting from higher interest rates.

The slight increase in net interest margin in 2017, compared with 2016, was due to repricing benefits of earning assets from higher interest rates exceeding the repricing costs of deposits and market based funding sources.

Table 4 presents the components of earning assets and funding sources as a percentage of earning assets to provide a more meaningful analysis of year-over-year changes that influenced net interest income.

Average earning assets increased $62.2 billion in 2017 from a year ago, as average loans increased $6.2 billion, average investment securities increased $50.4 billion, and average trading assets increased $13.3 billion in 2017, compared with a year ago. In addition, average federal funds sold and other short-term investments decreased $11.2 billion in 2017, compared with a year ago.

Deposits are an important low-cost source of funding and affect both net interest income and the net interest margin. Deposits include noninterest-bearing deposits, interest-bearing checking, market rate and other savings, savings certificates, other time deposits, and deposits in foreign offices. Average deposits increased to $1.30 trillion in 2017, compared with $1.25 trillion in 2016, and represented 136% of average loans compared with 132% a year ago. Average deposits were 74% of average earning assets in 2017, compared with 73% a year ago.

Table 5 presents the individual components of net interest income and the net interest margin. The effect on interest income and costs of earning asset and funding mix changes described above, combined with rate changes during 2017, are analyzed in Table 6.

Table 4: Average Earning Assets and Funding Sources as a Percentage of Average Earning Assets

	Year ended December 31,			
	2017		2016	
(in millions)	**Average balance**	**% of earning assets**	Average balance	% of earning assets
Earning assets				
Federal funds sold, securities purchased under resale agreements and other short-term investments	**$ 276,561**	**16%**	$ 287,718	17%
Trading assets	**101,716**	**6**	88,400	5
Investment securities:				
Available-for-sale securities:				
Securities of U.S. Treasury and federal agencies	**15,966**	**1**	29,418	2
Securities of U.S. states and political subdivisions	**52,658**	**3**	52,959	3
Mortgage-backed securities:				
Federal agencies	**145,310**	**8**	110,637	7
Residential and commercial	**11,839**	**1**	18,725	1
Other debt and equity securities	**49,193**	**3**	53,433	3
Total available-for-sale securities	**274,966**	**16**	265,172	16
Held-to-maturity securities:				
Securities of U.S. Treasury and federal agencies	**44,705**	**3**	44,675	3
Securities of U.S. states and political subdivisions	**6,268**	**—**	2,893	—
Federal agency mortgage-backed securities	**78,330**	**4**	39,330	2
Other debt securities	**2,194**	**—**	4,043	—
Held-to-maturity securities	**131,497**	**7**	90,941	5
Total investment securities	**406,463**	**23**	356,113	21
Mortgages held for sale (1)	**20,780**	**1**	22,412	1
Loans held for sale (1)	**147**	**—**	218	—
Loans:				
Commercial:				
Commercial and industrial – U.S.	**272,034**	**15**	268,182	16
Commercial and industrial – Non U.S.	**57,198**	**3**	51,601	3
Real estate mortgage	**129,990**	**8**	127,232	8
Real estate construction	**24,813**	**1**	23,197	1
Lease financing	**19,128**	**1**	17,950	1
Total commercial	**503,163**	**28**	488,162	29
Consumer:				
Real estate 1-4 family first mortgage	**277,751**	**16**	276,712	16
Real estate 1-4 family junior lien mortgage	**42,780**	**3**	49,735	3
Credit card	**35,600**	**2**	34,178	2
Automobile	**57,900**	**3**	61,566	4
Other revolving credit and installment	**38,935**	**2**	39,607	2
Total consumer	**452,966**	**26**	461,798	27
Total loans (1)	**956,129**	**54**	949,960	56
Other	**11,445**	**—**	6,262	—
Total earning assets	**$ 1,773,241**	**100%**	$ 1,711,083	100%
Funding sources				
Deposits:				
Interest-bearing checking	**$ 49,474**	**3%**	$ 42,379	2%
Market rate and other savings	**682,053**	**39**	663,557	39
Savings certificates	**22,190**	**1**	25,912	2
Other time deposits	**61,625**	**3**	55,846	3
Deposits in foreign offices	**123,816**	**7**	103,206	6
Total interest-bearing deposits	**939,158**	**53**	890,900	52
Short-term borrowings	**98,922**	**6**	115,187	7
Long-term debt	**246,195**	**14**	239,471	14
Other liabilities	**21,872**	**1**	16,702	1
Total interest-bearing liabilities	**1,306,147**	**74**	1,262,260	74
Portion of noninterest-bearing funding sources	**467,094**	**26**	448,823	26
Total funding sources	**$ 1,773,241**	**100%**	$ 1,711,083	100%
Noninterest-earning assets				
Cash and due from banks	**$ 18,622**		18,617	
Goodwill	**26,629**		26,700	
Other	**114,513**		129,041	
Total noninterest-earning assets	**$ 159,764**		174,358	
Noninterest-bearing funding sources				
Deposits	**$ 365,464**		359,666	
Other liabilities	**55,740**		62,825	
Total equity	**205,654**		200,690	
Noninterest-bearing funding sources used to fund earning assets	**(467,094)**		(448,823)	
Net noninterest-bearing funding sources	**$ 159,764**		174,358	
Total assets	**$ 1,933,005**		1,885,441	

(1) Nonaccrual loans are included in their respective loan categories.

Table 5: Average Balances, Yields and Rates Paid (Taxable-Equivalent Basis) (1)(2)

(in millions)	2017 Average balance	2017 Yields/ rates	2017 Interest income/ expense	2016 Average balance	2016 Yields/ rates	2016 Interest income/ expense
Earning assets						
Federal funds sold, securities purchased under resale agreements and other short-term investments	$ 276,561	1.05%	$ 2,897	287,718	0.51%	$ 1,457
Trading assets	101,716	2.93	2,982	88,400	2.89	2,553
Investment securities (3):						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	15,966	1.49	239	29,418	1.56	457
Securities of U.S. states and political subdivisions	52,658	3.95	2,082	52,959	4.20	2,225
Mortgage-backed securities:						
Federal agencies	145,310	2.60	3,782	110,637	2.50	2,764
Residential and commercial	11,839	5.33	631	18,725	5.49	1,029
Other debt and equity securities	49,193	3.73	1,834	53,433	3.44	1,841
Total available-for-sale securities	274,966	3.12	8,568	265,172	3.14	8,316
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	44,705	2.19	979	44,675	2.19	979
Securities of U.S. states and political subdivisions	6,268	5.32	334	2,893	5.32	154
Federal agency and other mortgage-backed securities	78,330	2.34	1,832	39,330	2.00	786
Other debt securities	2,194	2.50	55	4,043	2.01	81
Held-to-maturity securities	131,497	2.43	3,200	90,941	2.20	2,000
Total investment securities	406,463	2.90	11,768	356,113	2.90	10,316
Mortgages held for sale (4)	20,780	3.78	786	22,412	3.50	784
Loans held for sale (4)	147	8.38	12	218	4.01	9
Loans:						
Commercial:						
Commercial and industrial – U.S.	272,034	3.75	10,196	268,182	3.45	9,243
Commercial and industrial – non U.S.	57,198	2.86	1,639	51,601	2.36	1,219
Real estate mortgage	129,990	3.74	4,859	127,232	3.44	4,371
Real estate construction	24,813	4.10	1,017	23,197	3.55	824
Lease financing	19,128	3.74	715	17,950	5.10	916
Total commercial	503,163	3.66	18,426	488,162	3.39	16,573
Consumer:						
Real estate 1-4 family first mortgage	277,751	4.03	11,206	276,712	4.01	11,096
Real estate 1-4 family junior lien mortgage	42,780	4.82	2,062	49,735	4.39	2,183
Credit card	35,600	12.23	4,355	34,178	11.62	3,970
Automobile	57,900	5.34	3,094	61,566	5.62	3,458
Other revolving credit and installment	38,935	6.18	2,408	39,607	5.93	2,350
Total consumer	452,966	5.11	23,125	461,798	4.99	23,057
Total loans (4)	956,129	4.35	41,551	949,960	4.17	39,630
Other	11,445	2.06	237	6,262	2.51	157
Total earning assets	$ 1,773,241	3.40%	$ 60,233	1,711,083	3.21%	$ 54,906
Funding sources						
Deposits:						
Interest-bearing checking	$ 49,474	0.49%	$ 242	42,379	0.14%	$ 60
Market rate and other savings	682,053	0.14	983	663,557	0.07	449
Savings certificates	22,190	0.30	67	25,912	0.35	91
Other time deposits	61,625	1.43	880	55,846	0.91	508
Deposits in foreign offices	123,816	0.68	841	103,206	0.28	287
Total interest-bearing deposits	939,158	0.32	3,013	890,900	0.16	1,395
Short-term borrowings	98,922	0.77	761	115,187	0.29	333
Long-term debt	246,195	2.09	5,157	239,471	1.60	3,830
Other liabilities	21,872	1.94	424	16,702	2.12	354
Total interest-bearing liabilities	1,306,147	0.72	9,355	1,262,260	0.47	5,912
Portion of noninterest-bearing funding sources	467,094	—	—	448,823	—	—
Total funding sources	$ 1,773,241	0.53	9,355	1,711,083	0.35	5,912
Net interest margin and net interest income on a taxable-equivalent basis (5)		2.87%	$ 50,878		2.86%	$ 48,994
Noninterest-earning assets						
Cash and due from banks	$ 18,622			18,617		
Goodwill	26,629			26,700		
Other	114,513			129,041		
Total noninterest-earning assets	$ 159,764			174,358		
Noninterest-bearing funding sources						
Deposits	$ 365,464			359,666		
Other liabilities	55,740			62,825		
Total equity	205,654			200,690		
Noninterest-bearing funding sources used to fund earning assets	(467,094)			(448,823)		
Net noninterest-bearing funding sources	$ 159,764			174,358		
Total assets	$ 1,933,005			1,885,441		

(1) Our average prime rate was 4.10% for the year ended December 31, 2017, 3.51% for the year ended December 31, 2016, 3.26% for the year ended December 31, 2015, and 3.25% for the years ended December 31, 2014, and 2013 . The average three-month London Interbank Offered Rate (LIBOR) was 1.26%, 0.74%, 0.32%, 0.23%, and 0.27% for the same years, respectively.
(2) Yield/rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.

2015			2014			2013		
Average balance	Yields/ rates	Interest income/ expense	Average balance	Yields/ rates	Interest income/ expense	Average balance	Yields/ rates	Interest income/ expense
$ 266,832	0.28%	$ 738	241,282	0.28%	$ 673	154,902	0.32%	$ 489
66,679	3.01	2,010	55,140	3.10	1,712	44,745	3.14	1,406
32,093	1.58	505	10,400	1.64	171	6,750	1.66	112
47,404	4.23	2,007	43,138	4.29	1,852	39,922	4.38	1,748
100,218	2.73	2,733	114,076	2.84	3,235	107,148	2.83	3,031
22,490	5.73	1,289	26,475	6.03	1,597	30,717	6.47	1,988
49,752	3.42	1,701	47,488	3.66	1,741	55,002	3.53	1,940
251,957	3.27	8,235	241,577	3.56	8,596	239,539	3.68	8,819
44,173	2.19	968	17,239	2.23	385	—	—	—
2,087	5.40	113	246	4.93	12	—	—	—
21,967	2.23	489	5,921	2.55	151	701	3.09	22
5,821	1.73	101	5,913	1.85	109	16	1.99	—
74,048	2.26	1,671	29,319	2.24	657	717	3.06	22
326,005	3.04	9,906	270,896	3.42	9,253	240,256	3.68	8,841
21,603	3.63	785	19,018	4.03	767	35,273	3.66	1,290
573	3.25	19	4,226	1.85	78	163	7.95	13
237,844	3.29	7,836	204,819	3.35	6,869	185,813	3.66	6,807
46,028	1.90	877	42,661	2.03	867	40,987	2.03	832
116,893	3.41	3,984	112,710	3.64	4,100	107,316	3.94	4,233
20,979	3.57	749	17,676	4.21	744	16,537	4.76	787
12,301	4.70	577	12,257	5.63	690	12,373	6.10	755
434,045	3.23	14,023	390,123	3.40	13,270	363,026	3.70	13,414
268,560	4.10	11,002	261,620	4.19	10,961	254,012	4.22	10,717
56,242	4.25	2,391	62,510	4.30	2,686	70,264	4.29	3,014
31,307	11.70	3,664	27,491	11.98	3,294	24,757	12.46	3,084
57,766	5.84	3,374	53,854	6.27	3,377	48,476	6.94	3,365
37,512	5.89	2,209	38,834	5.48	2,127	42,135	4.80	2,024
451,387	5.02	22,640	444,309	5.05	22,445	439,644	5.05	22,204
885,432	4.14	36,663	834,432	4.28	35,715	802,670	4.44	35,618
4,947	5.11	252	4,673	5.54	259	4,354	5.39	235
$ 1,572,071	3.20%	$ 50,373	1,429,667	3.39%	$ 48,457	1,282,363	3.73%	$ 47,892
$ 38,640	0.05%	$ 20	39,729	0.07%	$ 26	35,570	0.06%	$ 22
625,549	0.06	367	585,854	0.07	403	550,394	0.08	450
31,887	0.63	201	38,111	0.85	323	49,510	1.13	559
51,790	0.45	232	51,434	0.40	207	28,090	0.69	194
107,138	0.13	143	95,889	0.14	137	76,894	0.15	112
855,004	0.11	963	811,017	0.14	1,096	740,458	0.18	1,337
87,465	0.07	64	60,111	0.10	62	54,716	0.13	71
185,078	1.40	2,592	167,420	1.49	2,488	134,937	1.92	2,585
16,545	2.15	357	14,401	2.65	382	12,471	2.46	307
1,144,092	0.35	3,976	1,052,949	0.38	4,028	942,582	0.46	4,300
427,979	—	—	376,718	—	—	339,781	—	—
$ 1,572,071	0.25	3,976	1,429,667	0.28	4,028	1,282,363	0.33	4,300
	2.95%	$ 46,397		3.11%	$ 44,429		3.40%	$ 43,592
$ 17,327			16,361			16,272		
25,673			25,687			25,637		
127,848			121,634			121,711		
$ 170,848			163,682			163,620		
$ 339,069			303,127			280,229		
68,174			56,985			58,178		
191,584			180,288			164,994		
(427,979)			(376,718)			(339,781)		
$ 170,848			163,682			163,620		
$ 1,742,919			1,593,349			1,445,983		

(3) The average balance amounts represent amortized cost for the periods presented.
(4) Nonaccrual loans and related income are included in their respective loan categories.
(5) Includes taxable-equivalent adjustments of $1.3 billion, $1.2 billion, $1.1 billion, $902 million and $792 million for the years ended December 31, 2017, 2016, 2015, 2014 and 2013, respectively, predominantly related to tax-exempt income on certain loans and securities. The federal statutory tax rate utilized was 35% for the periods presented.

Table 6 allocates the changes in net interest income on a taxable-equivalent basis to changes in either average balances or average rates for both interest-earning assets and interest-bearing liabilities. Because of the numerous simultaneous volume and rate changes during any period, it is not possible to precisely allocate such changes between volume and rate. For this table, changes that are not solely due to either volume or rate are allocated to these categories on a pro-rata basis based on the absolute value of the change due to average volume and average rate.

Table 6: Analysis of Changes in Net Interest Income

	Year ended December 31,					
	2017 over 2016			2016 over 2015		
(in millions)	Volume	Rate	Total	Volume	Rate	Total
Increase (decrease) in interest income:						
Federal funds sold, securities purchased under resale agreements and other short-term investments	$ (59)	1,499	1,440	62	657	719
Trading assets	393	36	429	626	(83)	543
Investment securities:						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	(198)	(20)	(218)	(42)	(6)	(48)
Securities of U.S. states and political subdivisions	(13)	(130)	(143)	232	(14)	218
Mortgage-backed securities:						
Federal agencies	902	116	1,018	272	(241)	31
Residential and commercial	(369)	(29)	(398)	(208)	(52)	(260)
Total mortgage-backed securities	533	87	620	64	(293)	(229)
Other debt and equity securities	(154)	147	(7)	130	10	140
Total available-for-sale securities	168	84	252	384	(303)	81
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	—	—	—	11	—	11
Securities of U.S. states and political subdivisions	180	—	180	43	(2)	41
Federal agency mortgage-backed securities	893	153	1,046	353	(56)	297
Other debt securities	(43)	17	(26)	(34)	14	(20)
Total held-to-maturity securities	1,030	170	1,200	373	(44)	329
Mortgages held for sale	(59)	61	2	28	(29)	(1)
Loans held for sale	(4)	7	3	(13)	3	(10)
Loans:						
Commercial:						
Commercial and industrial – U.S.	135	818	953	1,018	389	1,407
Commercial and industrial – non U.S.	142	278	420	114	228	342
Real estate mortgage	97	391	488	352	35	387
Real estate construction	59	134	193	79	(4)	75
Lease financing	57	(258)	(201)	286	53	339
Total commercial	490	1,363	1,853	1,849	701	2,550
Consumer:						
Real estate 1-4 family first mortgage	48	62	110	335	(241)	94
Real estate 1-4 family junior lien mortgage	(323)	202	(121)	(285)	77	(208)
Credit card	170	215	385	331	(25)	306
Automobile	(198)	(166)	(364)	215	(131)	84
Other revolving credit and installment	(40)	98	58	126	15	141
Total consumer	(343)	411	68	722	(305)	417
Total loans	147	1,774	1,921	2,571	396	2,967
Other	112	(32)	80	56	(151)	(95)
Total increase in interest income	1,728	3,599	5,327	4,087	446	4,533
Increase (decrease) in interest expense:						
Deposits:						
Interest-bearing checking	11	171	182	2	38	40
Market rate and other savings	14	520	534	22	60	82
Savings certificates	(12)	(12)	(24)	(33)	(77)	(110)
Other time deposits	57	315	372	20	256	276
Deposits in foreign offices	68	486	554	(5)	149	144
Total interest-bearing deposits	138	1,480	1,618	6	426	432
Short-term borrowings	(53)	481	428	25	244	269
Long-term debt	111	1,216	1,327	833	405	1,238
Other liabilities	102	(32)	70	3	(6)	(3)
Total increase in interest expense	298	3,145	3,443	867	1,069	1,936
Increase (decrease) in net interest income on a taxable-equivalent basis	$ 1,430	454	1,884	3,220	(623)	2,597

Noninterest Income

Table 7: Noninterest Income

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Service charges on deposit accounts	**$ 5,111**	5,372	5,168
Trust and investment fees:			
Brokerage advisory, commissions and other fees	**9,358**	9,216	9,435
Trust and investment management	**3,372**	3,336	3,394
Investment banking	**1,765**	1,691	1,639
Total trust and investment fees	**14,495**	14,243	14,468
Card fees	**3,960**	3,936	3,720
Other fees:			
Charges and fees on loans	**1,263**	1,241	1,228
Cash network fees	**506**	537	522
Commercial real estate brokerage commissions	**462**	494	618
Letters of credit fees	**305**	321	353
Wire transfer and other remittance fees	**448**	401	370
All other fees (1)(2)(3)	**573**	733	1,233
Total other fees	**3,557**	3,727	4,324
Mortgage banking:			
Servicing income, net	**1,427**	1,765	2,441
Net gains on mortgage loan origination/sales activities	**2,923**	4,331	4,060
Total mortgage banking	**4,350**	6,096	6,501
Insurance	**1,049**	1,268	1,694
Net gains from trading activities	**1,053**	834	614
Net gains on debt securities	**479**	942	952
Net gains from equity investments	**1,268**	879	2,230
Lease income	**1,907**	1,927	621
Life insurance investment income	**594**	587	579
All other (3)	**1,009**	702	(115)
Total	**$ 38,832**	40,513	40,756

(1) Wire transfer and other remittance fees, reflected in all other fees prior to 2016, have been separately disclosed.
(2) All other fees have been revised to include merchant processing fees for the years ended 2016 and 2015.
(3) Effective fourth quarter 2015, the Company's proportionate share of its merchant services joint venture earnings is included in All other income.

Noninterest income of $38.8 billion represented 44% of revenue for 2017, compared with $40.5 billion, or 46%, for 2016 and $40.8 billion, or 47%, for 2015. The decline in noninterest income in 2017 compared with 2016 was predominantly driven by lower mortgage banking, impairments on low income housing credits and tax-advantaged renewable energy investments as a result of the Tax Act, and lower service charges on deposit accounts. These decreases in noninterest income were partially offset by growth in trust and investment fees, deferred compensation plan investment results (offset in employee benefits expense), and the net impact of our insurance services business divestiture in November 2017 and a gain from the sale of a Pick-a-Pay PCI loan portfolio. The decline in noninterest income in 2016 compared with 2015 was largely driven by lower net gains from equity investments, mortgage banking, and insurance income due to the divestiture of our crop insurance business, partially offset by growth in lease income related to the GE Capital business acquisitions and gains from the sale of our crop insurance and health benefit services businesses. For more information on our performance obligations and the nature of services performed for certain of our revenues discussed below, see Note 20 (Revenue from Contracts with Customers) to Financial Statements in this Report.

Service charges on deposit accounts were $5.1 billion in 2017, down from $5.4 billion in 2016 due to lower consumer and business checking account service charges, lower overdraft fees driven by customer-friendly initiatives including the Overdraft Rewind launched in November 2017, and a higher earnings credit rate applied to commercial accounts due to increased interest rates. Service charges on deposit accounts increased $204 million in 2016 from 2015 due to higher overdraft fee revenue driven by growth in transaction volume, account growth and higher fees from commercial products and re-pricing.

Brokerage advisory, commissions and other fees increased to $9.4 billion in 2017, from $9.2 billion in 2016, which decreased $219 million compared with 2015. The increase in these fees for 2017 was due to higher asset-based fees, partially offset by lower transactional commission revenue. The decrease in 2016 was predominantly due to lower transactional commission revenue. Retail brokerage client assets totaled $1.65 trillion at December 31, 2017, compared with $1.49 trillion and $1.39 trillion at December 31, 2016 and 2015, respectively, with all retail brokerage services provided by our WIM operating segment. For additional information on retail brokerage client assets, see the discussion and Tables 9d and 9e in the "Operating Segment Results – Wealth and Investment Management – Retail Brokerage Client Assets" section in this Report.

Trust and investment management fee income is primarily from client assets under management (AUM), for which fees are based on a tiered scale relative to market value of the assets, and client assets under administration (AUA), for which fees are generally based on the extent of services to administer the assets. Trust and investment management fees of $3.4 billion in 2017 were relatively stable compared with 2016. Trust and investment management fees of $3.3 billion in 2016 decreased $58 million compared with 2015, due to a shift of assets into lower yielding products. Our AUM totaled $690.3 billion at December 31, 2017, compared with $652.2 billion and $653.4 billion at December 31, 2016 and 2015, respectively, with substantially all of our AUM managed by our WIM operating segment. Additional information regarding our WIM operating segment AUM is provided in Table 9f and the related discussion in the "Operating Segment Results – Wealth and Investment Management – Trust and Investment Client Assets Under Management" section in this Report. Our AUA totaled $1.7 trillion at December 31, 2017, compared with $1.6 trillion and $1.4 trillion at December 31, 2016 and 2015, respectively.

Investment banking fees of $1.8 billion in 2017 increased from $1.7 billion in 2016 due to higher equity and debt originations, partially offset by lower advisory fees. Investment banking fees in 2016 increased $52 million compared with 2015 due to higher loan syndications and advisory fees, partially offset by lower equity originations.

Card fees were $4.0 billion in 2017, compared with $3.9 billion in 2016 and $3.7 billion in 2015. Card fees increased in 2017 and 2016 predominantly due to increased purchase activity.

Other fees of $3.6 billion in 2017 decreased compared with 2016 predominantly driven by lower all other fees. Other fees in 2016 decreased compared with 2015 predominantly driven by lower commercial real estate brokerage commissions and all other fees. All other fees were $573 million in 2017, compared with $733 million in 2016 and $1.2 billion in 2015. The decrease in all other fees in 2017 compared with 2016 was driven by lower fees from discontinued products and the impact of the sale of our global fund services business in fourth quarter 2016. The decrease in all other fees in 2016 compared with 2015 was predominantly due to the deconsolidation of our merchant services joint venture in fourth quarter 2015, which resulted in a proportionate share of that income now being reflected in all other income.

Mortgage banking income, consisting of net servicing income and net gains on loan origination/sales activities, totaled

$4.4 billion in 2017, compared with $6.1 billion in 2016 and $6.5 billion in 2015.

In addition to servicing fees, net mortgage loan servicing income includes amortization of commercial mortgage servicing rights (MSRs), changes in the fair value of residential MSRs during the period, as well as changes in the value of derivatives (economic hedges) used to hedge the residential MSRs during the period. Net servicing income of $1.4 billion for 2017 included a $287 million net MSR valuation gain ($126 million decrease in the fair value of the MSRs and a $413 million hedge gain). Net servicing income of $1.8 billion for 2016 included a $826 million net MSR valuation gain ($565 million increase in the fair value of the MSRs and a $261 million hedge gain), and net servicing income of $2.4 billion for 2015 included a $885 million net MSR valuation gain ($214 million increase in the fair value of MSRs and a $671 million hedge gain). The decrease in net MSR valuation gains in 2017, compared with 2016, was largely attributable to lower hedge gains in 2017 and MSR valuation adjustments in first quarter 2016 that reflected a reduction in forecasted prepayments due to updated economic, customer data attributes and mortgage market rate inputs. The decrease in net MSR valuation gains in 2016, compared with 2015, was predominantly attributable to lower hedge gains, partially offset by more favorable MSR valuation adjustments in 2016 for servicing and foreclosure costs, net of prepayment and other updates. The decline in net servicing income from 2015 to 2016 was also attributable to a reduction in net servicing fees due to a reduction in the portfolio of loans serviced for others as well as an increase in unreimbursed direct servicing costs.

Our portfolio of loans serviced for others was $1.70 trillion at December 31, 2017, $1.68 trillion at December 31, 2016, and $1.78 trillion at December 31, 2015. At December 31, 2017, the ratio of combined residential and commercial MSRs to related loans serviced for others was 0.88%, compared with 0.85% at December 31, 2016, and 0.77% at December 31, 2015. See the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk" section in this Report for additional information regarding our MSRs risks and hedging approach.

Net gains on mortgage loan origination/sales activities was $2.9 billion in 2017, compared with $4.3 billion in 2016 and $4.1 billion in 2015. The decrease in 2017 compared with 2016 was largely driven by decreased origination volumes and margins. The increase in 2016 from 2015 was predominantly driven by increased origination volumes, partially offset by lower margins. Mortgage loan originations were $212 billion in 2017, compared with $249 billion for 2016 and $213 billion for 2015. The production margin on residential held-for-sale mortgage originations, which represents net gains on residential mortgage loan origination/sales activities divided by total residential held-for-sale mortgage originations, provides a measure of the profitability of our residential mortgage origination activity. Table 7a presents the information used in determining the production margin.

Table 7a: Selected Mortgage Production Data

		Year ended December 31,		
		2017	2016	2015
Net gains on mortgage loan origination/sales activities (in millions):				
Residential	(A)	**$ 2,140**	3,168	2,861
Commercial		**358**	400	362
Residential pipeline and unsold/ repurchased loan management (1)		**425**	763	837
Total		**$ 2,923**	4,331	4,060
Residential real estate originations (in billions):				
Held-for-sale	(B)	**$ 160**	186	155
Held-for-investment		**52**	63	58
Total		**$ 212**	249	213
Production margin on residential held-for-sale mortgage originations	(A)/(B)	**1.34%**	1.71	1.84

(1) Predominantly includes the results of sales of modified Government National Mortgage Association (GNMA) loans, interest rate management activities and changes in estimate to the liability for mortgage loan repurchase losses.

The production margin was 1.34% for 2017, compared with 1.71% for 2016 and 1.84% for 2015. The decrease in the production margin in both 2017 and 2016 was due to a shift in origination channel mix from retail to correspondent. Mortgage applications were $278 billion in 2017, compared with $347 billion in 2016 and $311 billion in 2015. The 1-4 family first mortgage unclosed pipeline was $23 billion at December 31, 2017, compared with $30 billion at December 31, 2016, and $29 billion at December 31, 2015. For additional information about our mortgage banking activities and results, see the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk" section and Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

Net gains on mortgage loan origination/sales activities include adjustments to the mortgage repurchase liability. Mortgage loans are repurchased from third parties based on standard representations and warranties, and early payment default clauses in mortgage sale contracts. For 2017, we released a net $39 million from the repurchase liability, compared with a net release of $103 million for 2016 and $159 million for 2015. For additional information about mortgage loan repurchases, see the "Risk Management – Credit Risk Management – Liability for Mortgage Loan Repurchase Losses" section and Note 9 (Mortgage Banking Activities) to Financial Statements in this Report.

Insurance income was $1.0 billion in 2017 compared with $1.3 billion in 2016 and $1.7 billion in 2015. The decrease in 2017 and 2016 was driven by the divestiture of our crop insurance business in first quarter 2016. The decrease in 2017 was also affected by the divestiture of our insurance services business in fourth quarter 2017.

Net gains from trading activities, which reflect unrealized changes in fair value of our trading positions and realized gains and losses, were $1.1 billion in 2017, $834 million in 2016 and $614 million in 2015. The increases in 2017 and 2016, compared with 2016 and 2015, respectively, were predominantly driven by higher deferred compensation gains (offset in employee benefits expense). The increase in 2016 also reflected higher customer accommodation trading activity within our capital markets business driven by higher fixed income trading gains. Net gains from trading activities do not include interest and dividend income and expense on trading securities. Those amounts are reported within interest income from trading assets and other interest expense from trading liabilities. For additional information about trading activities, see the "Risk Management – Asset/Liability Management – Market Risk – Trading Activities" section in this Report.

Net gains on debt and equity securities totaled $1.7 billion for 2017 and $1.8 billion and $3.2 billion for 2016 and 2015, respectively, after other-than-temporary impairment (OTTI) write-downs of $606 million, $642 million and $559 million, respectively, for the same periods. The decrease in net gains on debt and equity securities in 2017 compared with 2016 was driven by lower net gains on debt securities, partially offset by higher net gains from equity investments from non-marketable equity investments. The decrease in net gains on debt and equity securities in 2016 compared with 2015 reflected lower net gains from equity investments as our portfolio benefited from strong public and private equity markets in 2015.

Lease income of $1.9 billion in 2017 was stable compared with 2016. Lease income increased $1.3 billion in 2016 compared with 2015, largely driven by the GE Capital business acquisitions.

All other income was $1.0 billion for 2017 compared with $702 million in 2016 and $(115) million in 2015. All other income includes ineffectiveness recognized on derivatives that qualify for hedge accounting, the results of certain economic hedges, losses on low income housing tax credit and renewable energy investments, foreign currency adjustments and income from investments accounted for under the equity method, any of which can cause decreases and net losses in other income. The increase in other income in 2017 compared with 2016 was driven by a $848 million pre-tax gain from the sale of our insurance services business in fourth quarter 2017 and a $309 million pre-tax gain from the sale of a Pick-a-Pay PCI loan portfolio in second quarter 2017, as well as the impact of the adoption of Accounting Standards Update (ASU) 2017-12 – *Derivatives and Hedging* in fourth quarter 2017, partially offset by a gain from the sale of our crop insurance business in first quarter 2016 and a gain from the sale of our health benefit services business in second quarter 2016. All other income in 2017 also included $284 million of impairments on low income housing investments and $130 million of impairments on tax-advantaged renewable energy investments in each case due to the Tax Act. The increase in other income in 2016 compared with 2015 was driven by a $374 million pre-tax gain from the sale of our crop insurance business in first quarter 2016, a $290 million gain from the sale of our health benefit services business in second quarter 2016, and our proportionate share of earnings from a merchant services joint venture that was deconsolidated in 2015, partially offset by changes in ineffectiveness recognized on interest rate swaps used to hedge our exposure to interest rate risk on long-term debt and cross-currency swaps, cross-currency interest rate swaps and forward contracts used to hedge our exposure to foreign currency risk and interest rate risk involving non-U.S. dollar denominated long-term debt.

Noninterest Expense

Table 8: Noninterest Expense

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Salaries	**$ 17,363**	16,552	15,883
Commission and incentive compensation	**10,442**	10,247	10,352
Employee benefits	**5,566**	5,094	4,446
Equipment	**2,237**	2,154	2,063
Net occupancy	**2,849**	2,855	2,886
Core deposit and other intangibles	**1,152**	1,192	1,246
FDIC and other deposit assessments	**1,287**	1,168	973
Operating losses	**5,492**	1,608	1,871
Outside professional services	**3,813**	3,138	2,665
Contract services	**1,369**	1,203	978
Operating leases	**1,351**	1,329	278
Outside data processing	**891**	888	985
Travel and entertainment	**687**	704	692
Advertising and promotion	**614**	595	606
Postage, stationery and supplies	**544**	622	702
Telecommunications	**364**	383	439
Foreclosed assets	**251**	202	381
Insurance	**100**	179	448
All other	**2,112**	2,264	2,080
Total	**$ 58,484**	52,377	49,974

Noninterest expense was $58.5 billion in 2017, up 12% from $52.4 billion in 2016, which was up 5% from $50.0 billion in 2015. The increase in 2017, compared with 2016, was predominantly driven by higher operating losses, personnel expenses, and outside professional and contract services, partially offset by lower insurance and postage, stationery and supplies. The increase in 2016, compared with 2015, was driven by higher personnel expenses, operating lease expense, outside professional services and contract services, and FDIC and other deposit assessments, partially offset by lower insurance, operating losses, foreclosed assets expense, and outside data processing.

Personnel expenses, which include salaries, commissions, incentive compensation and employee benefits, were up $1.5 billion, or 5% in 2017, compared with 2016, due to annual salary increases, higher deferred compensation costs (offset in trading revenue), and higher employee benefits. Personnel expenses were up $1.2 billion, or 4% in 2016, compared with 2015, due to annual salary increases, staffing growth driven by the GE Capital business acquisitions and investments in technology and risk management, higher deferred compensation expense (offset in trading revenue) and increased employee benefits.

FDIC and other deposit assessments were up 10% in 2017, compared with 2016, due to an increase in deposit assessments as a result of a temporary surcharge which became effective on July 1, 2016. The FDIC expects the surcharge to end in third quarter 2018. FDIC and other deposit assessments were up 20% in 2016, compared with 2015, primarily due to the aforementioned temporary surcharge. See the “Regulation and Supervision” section in our 2017 Form 10-K for additional information.

Operating losses were up $3.9 billion in 2017, compared with 2016, predominantly due to higher litigation accruals for a variety of matters, including mortgage-related regulatory investigations, sales practices, and other consumer-related matters. Litigation accruals in 2017 included $3.7 billion that were non tax-deductible. Operating losses were down $263 million, or 14%, in 2016 compared with 2015, predominantly due to lower litigation accruals for various legal matters.

Outside professional services expense was up 22% and contract services expense was up 14% in 2017, compared with 2016. Both increases were driven by higher project and technology spending on regulatory and compliance related initiatives, as well as higher legal expense related to sales practice matters. Outside professional services expense was up 18% and contract services expense was up 23% in 2016, compared with 2015, driven by investments in our products, technology and service delivery, as well as costs to meet heightened regulatory expectations and cybersecurity risk.

Operating lease expense of $1.4 billion in 2017 was relatively stable, compared with 2016, and was up $1.1 billion in 2016, compared with 2015, driven by higher depreciation expense on the leased assets acquired from GE Capital.

Outside data processing expense was relatively stable compared with 2016 and was down 10% in 2016, compared with 2015. The decrease in 2016, compared with 2015, was due to lower card-related processing expense and the deconsolidation of our merchant services joint venture in fourth quarter 2015, partially offset by increased data processing expense related to the GE Capital business acquisitions.

Postage, stationery and supplies expense was down 13% in 2017, compared with 2016, due to lower mail services and supplies expense. Postage, stationery and supplies expense was down 11% in 2016, compared with 2015, driven by lower postage and mail services expense.

Telecommunications expense was down 5% in 2017, compared with 2016, and down 13% in 2016, compared with 2015, in each case driven by lower telephone and data rates.

Foreclosed assets expense was up 24% in 2017, compared with 2016, due to lower gains on sales of foreclosed properties, partially offset by lower operating expenses. Foreclosed assets expense was down 47% in 2016, compared with 2015, driven by lower operating expense and write-downs, partially offset by lower gains on sales of foreclosed properties.

Insurance expense was down 44% in 2017, compared with 2016, predominantly driven by the sale of our crop insurance business in first quarter 2016. Insurance expense was down 60% in 2016, compared with 2015, due to the sale of our crop insurance business in first quarter 2016 and the sale of our Warranty Solutions business in third quarter 2015.

All other noninterest expense was down 7% in 2017, compared with 2016, due to lower insurance premium payments and higher gains on the sale of a corporate property, partially offset by higher charitable donations expense. All other noninterest expense was up 9% in 2016, compared with 2015, driven by higher insurance premium payments. All other noninterest expense in 2017 included a $199 million contribution to the Wells Fargo Foundation, compared with a $107 million contribution in 2016.

Our full year 2017 efficiency ratio was 66.2%, compared with 59.3% in 2016 and 58.1% in 2015.

Income Tax Expense

The 2017 annual effective income tax rate was 18.1%, compared with 31.5% in 2016 and 31.2% in 2015. The effective income tax rate for 2017 reflected the estimated impact of the Tax Act, including a benefit of $3.89 billion resulting from the re-measurement of the Company's estimated net deferred tax liability as of December 31, 2017, partially offset by $173 million of tax expense relating to the estimated tax impact of the deemed repatriation of the Company's previously undistributed foreign earnings. The benefit of the Tax Act on the effective income tax rate in 2017 was partially offset by $1.3 billion relating to the tax effect of discrete non tax-deductible items (predominantly litigation accruals). For 2017, we were able to make reasonable estimates and record provisional amounts related to the impacts of the Tax Act. We will complete these calculations during 2018 as we finalize our tax filings for 2017 and finalize our analysis of the Tax Act and applicable interpretive guidance issued by federal and state tax authorities. The effective income tax rate for 2016 reflected a net benefit from the reduction to the reserve for uncertain tax positions resulting from settlements with tax authorities and a net increase in tax benefits related to tax credit investments. The effective income tax rate for 2015 included net reductions in reserves for uncertain tax positions primarily due to audit resolutions of prior period matters with U.S. federal and state taxing authorities. See Note 22 (Income Taxes) to Financial Statements in this Report for additional information about our income taxes.

Operating Segment Results

We are organized for management reporting purposes into three operating segments: Community Banking; Wholesale Banking; and WIM. These segments are defined by product type and customer segment and their results are based on our management accounting process, for which there is no comprehensive, authoritative financial accounting guidance equivalent to generally accepted accounting principles (GAAP). Commencing in second quarter 2016, operating segment results reflect a shift in expenses between the personnel and other expense categories as a result of the movement of support staff from the Wholesale Banking and WIM segments into a consolidated organization within the Community Banking segment. Since then, personnel expenses associated with the transferred support staff have been allocated from Community Banking back to the Wholesale Banking and WIM segments through other expense. Table 9 and the following discussion present our results by operating segment. For additional description of our operating segments, including additional financial information and the underlying management accounting process, see Note 25 (Operating Segments) to Financial Statements in this Report.

Table 9: Operating Segment Results – Highlights

					Year ended December 31,
(in millions, except average balances which are in billions)	Community Banking	Wholesale Banking	Wealth and Investment Management	Other (1)	Consolidated Company
2017					
Revenue	**$ 48,707**	**28,173**	**16,926**	**(5,417)**	**88,389**
Provision (reversal of provision) for credit losses	**2,555**	**(19)**	**(5)**	**(3)**	**2,528**
Net income (loss)	**12,071**	**8,699**	**2,674**	**(1,261)**	**22,183**
Average loans	**$ 476.7**	**464.6**	**71.9**	**(57.1)**	**956.1**
Average deposits	**729.3**	**464.5**	**189.0**	**(78.2)**	**1,304.6**
2016					
Revenue	$ 48,866	28,542	15,946	(5,087)	88,267
Provision (reversal of provision) for credit losses	2,691	1,073	(5)	11	3,770
Net income (loss)	12,435	8,235	2,426	(1,158)	21,938
Average loans	$ 486.9	449.3	67.3	(53.5)	950.0
Average deposits	701.2	438.6	187.8	(77.0)	1,250.6
2015					
Revenue	$ 49,341	25,904	15,777	(4,965)	86,057
Provision (reversal of provision) for credit losses	2,427	27	(25)	13	2,442
Net income (loss)	13,491	8,194	2,316	(1,107)	22,894
Average loans	$ 475.9	397.3	60.1	(47.9)	885.4
Average deposits	654.4	438.9	172.3	(71.5)	1,194.1

(1) Includes the elimination of certain items that are included in more than one business segment, most of which represents products and services for WIM customers served through Community Banking distribution channels.

Community Banking offers a complete line of diversified financial products and services for consumers and small businesses including checking and savings accounts, credit and debit cards, and automobile, student, mortgage, home equity and small business lending, as well as referrals to Wholesale Banking and WIM business partners. The Community Banking segment also includes the results of our Corporate Treasury activities net of allocations (including funds transfer pricing, capital, liquidity and certain corporate expenses) in support of other segments and results of investments in our affiliated venture capital partnerships. We announced on November 28, 2017, that we will exit the personal insurance business, and we have begun winding down activities and ceased offering personal insurance products, effective February 1, 2018. Table 9a provides additional financial information for Community Banking.

Table 9a: Community Banking

					Year ended December 31,
(in millions, except average balances which are in billions)	**2017**	2016	% Change	2015	% Change
Net interest income	**$ 30,365**	29,833	2 %	$ 29,242	2 %
Noninterest income:					
Service charges on deposit accounts	**2,905**	3,136	(7)	3,014	4
Trust and investment fees:					
Brokerage advisory, commissions and other fees (1)	**1,831**	1,854	(1)	2,044	(9)
Trust and investment management (1)	**889**	849	5	855	(1)
Investment banking (2)	**(60)**	(141)	57	(123)	(15)
Total trust and investment fees	**2,660**	2,562	4	2,776	(8)
Card fees	**3,613**	3,592	1	3,381	6
Other fees	**1,497**	1,494	—	1,446	3
Mortgage banking	**3,895**	5,624	(31)	6,056	(7)
Insurance	**98**	6	NM	96	(94)
Net gains (losses) from trading activities	**59**	(17)	447	(146)	88
Net gains on debt securities	**709**	928	(24)	556	67
Net gains from equity investments (3)	**1,144**	673	70	1,714	(61)
Other income of the segment	**1,762**	1,035	70	1,206	(14)
Total noninterest income	**18,342**	19,033	(4)	20,099	(5)
Total revenue	**48,707**	48,866	—	49,341	(1)
Provision for credit losses	**2,555**	2,691	(5)	2,427	11
Noninterest expense:					
Personnel expense	**20,345**	18,655	9	17,574	6
Equipment	**2,157**	2,035	6	1,914	6
Net occupancy	**2,107**	2,070	2	2,104	(2)
Core deposit and other intangibles	**446**	500	(11)	573	(13)
FDIC and other deposit assessments	**715**	649	10	549	18
Outside professional services	**1,863**	1,169	59	1,012	16
Operating losses	**5,312**	1,451	266	1,503	(3)
Other expense of the segment	**(467)**	893	NM	1,752	(49)
Total noninterest expense	**32,478**	27,422	18	26,981	2
Income before income tax expense and noncontrolling interests	**13,674**	18,753	(27)	19,933	(6)
Income tax expense	**1,327**	6,182	(79)	6,202	—
Net income from noncontrolling interests (4)	**276**	136	103	240	(43)
Net income	**$ 12,071**	12,435	(3)%	$ 13,491	(8)%
Average loans	**$ 476.7**	486.9	(2)%	$ 475.9	2 %
Average deposits	**729.3**	701.2	4	654.4	7

NM - Not meaningful

(1) Represents income on products and services for WIM customers served through Community Banking distribution channels and is eliminated in consolidation.

(2) Includes syndication and underwriting fees paid to Wells Fargo Securities which are offset in our Wholesale Banking segment.

(3) Predominantly represents gains resulting from venture capital investments.

(4) Reflects results attributable to noncontrolling interests predominantly associated with the Company's consolidated venture capital investments.

Community Banking reported net income of $12.1 billion in 2017, down $364 million, or 3%, from $12.4 billion in 2016, which was down $1.1 billion, or 8%, in 2015. Income tax expense in 2017 reflected the estimated net benefit from the impact of the Tax Act to the Company, partially offset by the impact of discrete non tax-deductible items, predominantly litigation accruals. Revenue was $48.7 billion in 2017, a decrease of $159 million, or 0.3%, compared with $48.9 billion in 2016, which was down $475 million, or 1%, compared with 2015. The decrease in revenue for 2017 was due to lower mortgage banking revenue driven by lower mortgage loan originations and a decrease in servicing income, lower service charges on deposit accounts, and lower gains on debt securities. The decrease in revenue in 2017 was partially offset by higher net interest income, gains on equity investments, deferred compensation plan investment results (offset in employee benefits expense), and other income (including higher net hedge ineffectiveness income and a gain on the sale of a mortgage loan portfolio). The decrease in revenue for 2016 was due to lower gains on equity investments, and lower mortgage banking revenue driven by a decrease in servicing income, partially offset by higher net gains on mortgage loan originations driven by higher origination volumes. Additionally, revenue in 2016 reflected lower trust and investment fees driven by a decrease in brokerage transactional revenue, and lower other income (including lower net hedge ineffectiveness income and a gain on the sale of our Warranty Solutions business in 2015). The decrease in revenue in 2016 was partially offset by higher net interest income, gains on debt securities, revenue from debit and credit card volumes, higher deferred compensation plan investment results (offset in employee benefits expense), and an increase in deposit service charges driven by higher overdraft fees and account growth. Average deposits increased $28.1 billion in 2017, or 4% from 2016, which increased $46.8 billion, or 7%, from 2015. Primary consumer checking customers (customers who actively use their checking account with transactions such as debit card purchases, online bill payments, and direct deposit) as of November 2017 were up 0.2% from November 2016.

Noninterest expense increased $5.1 billion in 2017, or 18%, from 2016, which increased $441 million, or 2%, from 2015. The increase in 2017 was due to higher litigation accruals (including $3.7 billion that were non tax-deductible), personnel expense driven by increased health insurance expense, deferred compensation plan expense (offset in trading revenue) and staffing, as well as higher project-related, equipment, and FDIC expense. These increases in noninterest expense were partially offset by lower foreclosed assets expense driven by improvement in the residential real estate portfolio, lower telephone and supplies expenses, travel and entertainment, and other expense. The increase in noninterest expense in 2016 was due to higher personnel expense driven by increased deferred compensation plan expense (offset in trading revenue) and increased staffing, as well as higher project-related, equipment, and FDIC expense. These increases in noninterest expense were partially offset by lower foreclosed assets expense driven by improvement in the residential real estate portfolio, lower telephone and supplies expenses, data processing costs, and other expense.

The provision for credit losses in 2017 decreased $136 million from 2016 due to credit improvement in the consumer lending portfolio, primarily consumer real estate. The provision for credit losses in 2016 increased $264 million from 2015 due to an increase in losses in the credit card, automobile and other consumer portfolios.

Wholesale Banking provides financial solutions to businesses across the United States and globally with annual sales generally in excess of $5 million. Products and businesses include Business Banking, Commercial Real Estate, Corporate Banking, Financial Institutions Group, Government and Institutional Banking, Middle Market Banking, Principal Investments, Treasury Management, Wells Fargo Commercial Capital, and Wells Fargo Securities. Table 9b provides additional financial information for Wholesale Banking.

Table 9b: Wholesale Banking

	Year ended December 31,				
(in millions, except average balances which are in billions)	**2017**	2016	% Change	2015	% Change
Net interest income	**$ 16,967**	16,052	6%	$ 14,350	12%
Noninterest income:					
Service charges on deposit accounts	**2,205**	2,235	(1)	2,153	4
Trust and investment fees:					
Brokerage advisory, commissions and other fees	**303**	368	(18)	285	29
Trust and investment management	**524**	473	11	407	16
Investment banking	**1,827**	1,833	—	1,762	4
Total trust and investment fees	**2,654**	2,674	(1)	2,454	9
Card fees	**345**	342	1	337	1
Other fees	**2,054**	2,226	(8)	2,872	(22)
Mortgage banking	**458**	475	(4)	447	6
Insurance	**913**	1,262	(28)	1,598	(21)
Net gains from trading activities	**700**	677	3	719	(6)
Net gains (losses) on debt securities	**(232)**	13	NM	396	(97)
Net gains from equity investments	**117**	199	(41)	511	(61)
Other income of the segment	**1,992**	2,387	(17)	67	NM
Total noninterest income	**11,206**	12,490	(10)	11,554	8
Total revenue	**28,173**	28,542	(1)	25,904	10
Provision (reversal of provision) for credit losses	**(19)**	1,073	NM	27	NM
Noninterest expense:					
Personnel expense	**6,639**	7,035	(6)	6,936	1
Equipment	**55**	72	(24)	97	(26)
Net occupancy	**429**	461	(7)	452	2
Core deposit and other intangibles	**414**	390	6	347	12
FDIC and other deposit assessments	**480**	429	12	352	22
Outside professional services	**1,146**	1,075	7	837	28
Operating losses	**74**	118	(37)	152	(22)
Other expense of the segment	**7,518**	6,546	15	4,943	32
Total noninterest expense	**16,755**	16,126	4	14,116	14
Income before income tax expense and noncontrolling interest	**11,437**	11,343	1	11,761	(4)
Income tax expense	**2,753**	3,136	(12)	3,424	(8)
Net income (loss) from noncontrolling interest	**(15)**	(28)	46	143	NM
Net income	**$ 8,699**	8,235	6%	$ 8,194	1%
Average loans	**$ 464.6**	449.3	3%	$ 397.3	13%
Average deposits	**464.5**	438.6	6	438.9	—

NM - Not meaningful

Wholesale Banking reported net income of $8.7 billion in 2017, up $464 million from 2016, which was up $41 million from 2015. The increase in net income in 2017 was due to higher net interest income and lower loan loss provision, partially offset by lower noninterest income and higher noninterest expense. The increase in 2016 compared with 2015 was due to increased revenue and lower minority interest expense, partially offset by higher loan loss provision and noninterest expense. Revenue in 2017 of $28.2 billion decreased $369 million, or 1%, from 2016, which increased $2.6 billion, or 10%, from 2015. Net interest income of $17.0 billion in 2017 increased $915 million, or 6%, from 2016, which increased $1.7 billion, or 12%, from 2015. The increase in net interest income in 2017 was due to loan and other earning asset growth as well as the impact of higher interest rates, partially offset by an adjustment related to leveraged leases resulting from the Tax Act that reduced net interest income by $183 million. The increase in net interest income in 2016 was due to strong loan and other earning asset growth.

Average loans of $464.6 billion in 2017 increased $15.3 billion, or 3%, from 2016, which increased $52.0 billion, or 13%, from 2015. Loan growth in 2017 and 2016 was broad based across many Wholesale Banking businesses and included the impact of the GE Capital business acquisitions in 2016. Average deposits of $464.5 billion in 2017 increased $25.9 billion, or 6%, compared with $438.6 billion in 2016, which was relatively flat compared with 2015.

Noninterest income of $11.2 billion in 2017 decreased $1.3 billion, or 10%, from 2016, which increased $936 million, or 8%, from 2015. The decrease in 2017 was driven by the gains on the sale of our crop insurance and health benefit services businesses in 2016, impairments to low income housing and renewable energy investments as a result of the Tax Act, lower insurance income driven by the 2016 sale of our crop insurance business, and lower gains on debt securities and equity investments. These declines were partially offset by a gain on the sale of our insurance services business in 2017. The increase in 2016, compared with 2015, was driven by increased lease income from the GE Capital business acquisitions, gains on the sale of our crop insurance and health benefit services businesses, increased trust and investment banking revenue driven by syndicated loan, advisory, and debt origination fees, and higher service charges on deposit accounts (which represented treasury management fees for providing cash management payable and receivable services), partially offset by lower gains on debt securities and equity investments, lower insurance income due to the divestiture of our crop insurance business, and lower other fees related to a decline in commercial real estate brokerage fees and the deconsolidation of our merchant services joint venture in fourth quarter 2015, which also lowered 2016 minority interest expense.

Noninterest expense of $16.8 billion in 2017 increased $629 million, or 4%, compared with 2016, which increased $2.0 billion, or 14%, compared with 2015. The increase in 2017 was predominantly due to increased project and technology spending on compliance and regulatory requirements. The increase in 2016 was due to higher personnel and operating lease expense related to the GE Capital business acquisitions as well as higher expenses related to growth initiatives, compliance and regulatory requirements. The provision for credit losses in 2017 decreased $1.1 billion from 2016, predominantly due to lower losses in the oil and gas portfolio. The provision for credit losses in 2016 increased $1.0 billion from 2015, primarily due to increased losses in the oil and gas portfolio.

Wealth and Investment Management provides a full range of personalized wealth management, investment and retirement products and services to clients across U.S. based businesses including Wells Fargo Advisors, The Private Bank, Abbot Downing, Wells Fargo Institutional Retirement and Trust, and Wells Fargo Asset Management. We deliver financial planning, private banking, credit, investment management and fiduciary services to high-net worth and ultra-high-net worth individuals and families. We also serve clients' brokerage needs, supply retirement and trust services to institutional clients and provide investment management capabilities delivered to global institutional clients through separate accounts and the Wells Fargo Funds. Table 9c provides additional financial information for WIM.

Table 9c: Wealth and Investment Management

					Year ended December 31,
(in millions, except average balances which are in billions)	**2017**	2016	% Change	2015	% Change
Net interest income	**$ 4,493**	3,913	15%	$ 3,478	13%
Noninterest income:					
Service charges on deposit accounts	**17**	19	(11)	19	—
Trust and investment fees:					
Brokerage advisory, commissions and other fees	**9,072**	8,870	2	9,154	(3)
Trust and investment management	**2,877**	2,891	—	3,017	(4)
Investment banking (1)	**(2)**	(1)	(100)	—	NM
Total trust and investment fees	**11,947**	11,760	2	12,171	(3)
Card fees	**6**	6	—	5	20
Other fees	**18**	18	—	17	6
Mortgage banking	**(10)**	(9)	(11)	(7)	(29)
Insurance	**88**	—	NM	—	NM
Net gains from trading activities	**294**	174	69	41	324
Net gains on debt securities	**2**	1	100	—	NM
Net gains from equity investments	**7**	7	—	5	40
Other income of the segment	**64**	57	12	48	19
Total noninterest income	**12,433**	12,033	3	12,299	(2)
Total revenue	**16,926**	15,946	6	15,777	1
Reversal of provision for credit losses	**(5)**	(5)	—	(25)	80
Noninterest expense:					
Personnel expense	**8,126**	7,852	3	7,820	—
Equipment	**28**	52	(46)	57	(9)
Net occupancy	**431**	442	(2)	447	(1)
Core deposit and other intangibles	**292**	302	(3)	326	(7)
FDIC and other deposit assessments	**155**	152	2	123	24
Outside professional services	**834**	925	(10)	846	9
Operating losses	**115**	50	130	229	(78)
Other expense of the segment	**2,650**	2,284	16	2,219	3
Total noninterest expense	**12,631**	12,059	5	12,067	—
Income before income tax expense and noncontrolling interest	**4,300**	3,892	10	3,735	4
Income tax expense	**1,610**	1,467	10	1,420	3
Net income (loss) from noncontrolling interest	**16**	(1)	NM	(1)	—
Net income	**$ 2,674**	2,426	10%	$ 2,316	5%
Average loans	**$ 71.9**	67.3	7%	$ 60.1	12%
Average deposits	**189.0**	187.8	1	172.3	9

NM - Not meaningful
(1) Includes syndication and underwriting fees paid to Wells Fargo Securities which are offset in our Wholesale Banking segment.

WIM reported net income of $2.7 billion in 2017, up $248 million, or 10%, from 2016, which was up $110 million, or 5%, from 2015. Revenue of $16.9 billion in 2017 increased $980 million from 2016, which was up $169 million from 2015. The increase in revenue for 2017 was due to growth in net interest income and asset-based fees. The increase in revenue for 2016 was due to growth in net interest income, partially offset by lower noninterest income. Net interest income increased 15% in 2017 and 13% in 2016, in each case due to growth in other earning assets and loan balances. Average loan balances of $71.9 billion in 2017 increased $4.6 billion from $67.3 billion in 2016, which was up 12% from 2015. Average deposits of $189.0 billion in 2017 increased 1% from $187.8 billion in 2016, which increased 9% from 2015. Noninterest income in 2017 increased 3% from 2016, due to higher asset-based fees and gains on deferred compensation plan investments (offset in employee benefits expense), partially offset by lower transaction revenue. Noninterest income in 2016 decreased 2% from 2015 due to lower transaction revenue from reduced client activity, and lower asset-based fees, partially offset by higher gains on deferred compensation plan investments (offset in employee benefits expense). Noninterest expense of $12.6 billion in 2017 increased 5% from $12.1 billion in 2016 due to higher project and technology spending on compliance and regulatory requirements, higher broker commissions, and higher deferred compensation plan expense (offset in trading revenue). Noninterest expense in 2016 was flat compared with 2015, as a decline in operating losses reflecting lower litigation expense for various legal matters was offset by higher outside professional services expense, other expense, and personnel expense. The provision for credit losses was flat in 2017 compared with 2016. The provision for credit losses increased $20 million in 2016, due to lower net recoveries.

The following discussions provide additional information for client assets we oversee in our retail brokerage advisory and trust and investment management business lines.

Retail Brokerage Client Assets Brokerage advisory, commissions and other fees are received for providing full-service and discount brokerage services predominantly to retail brokerage clients. Offering advisory account relationships to our brokerage clients is an important component of our broader strategy of meeting their financial needs. Although a majority of our retail brokerage client assets are in accounts that earn brokerage commissions, the fees from those accounts generally represent transactional commissions based on the number and size of transactions executed at the client's direction. Fees earned from advisory accounts are asset-based and depend on changes in the value of the client's assets as well as the level of assets resulting from inflows and outflows. A majority of our brokerage advisory, commissions and other fee income is earned from advisory accounts. Table 9d shows advisory account client assets as a percentage of total retail brokerage client assets at December 31, 2017, 2016 and 2015.

Table 9d: Retail Brokerage Client Assets

	Year ended December 31,		
(in billions)	**2017**	2016	2015
Retail brokerage client assets	$ **1,651.3**	1,486.1	1,386.9
Advisory account client assets	**542.8**	463.8	419.9
Advisory account client assets as a percentage of total client assets	**33%**	31	30

Retail Brokerage advisory accounts include assets that are financial advisor-directed and separately managed by third-party managers, as well as certain client-directed brokerage assets where we earn a fee for advisory and other services, but do not have investment discretion. These advisory accounts generate fees as a percentage of the market value of the assets, which vary across the account types based on the distinct services provided, and are affected by investment performance as well as asset inflows and outflows. For the years ended December 31, 2017, 2016 and 2015, the average fee rate by account type ranged from 80 to 120 basis points. Table 9e presents retail brokerage advisory account client assets activity by account type for the years ended December 31, 2017, 2016 and 2015.

Table 9e: Retail Brokerage Advisory Account Client Assets

	Year ended				
(in billions)	Balance, beginning of period	Inflows (1)	Outflows (2)	Market impact (3)	Balance, end of period
December 31, 2017					
Client directed (4)	$ **159.1**	**37.1**	**(39.2)**	**13.9**	**170.9**
Financial advisor directed (5)	**115.7**	**30.6**	**(24.5)**	**25.2**	**147.0**
Separate accounts (6)	**125.7**	**26.1**	**(23.5)**	**20.8**	**149.1**
Mutual fund advisory (7)	**63.3**	**13.1**	**(11.1)**	**10.5**	**75.8**
Total advisory client assets	**463.8**	**106.9**	**(98.3)**	**70.4**	**542.8**
December 31, 2016					
Client directed (4)	154.7	36.0	(37.5)	5.9	159.1
Financial advisor directed (5)	91.9	28.6	(18.7)	13.9	115.7
Separate accounts (6)	110.4	26.0	(21.9)	11.2	125.7
Mutual fund advisory (7)	62.9	8.7	(11.6)	3.3	63.3
Total advisory client assets	419.9	99.3	(89.7)	34.3	463.8
December 31, 2015					
Client directed (4)	159.8	38.7	(37.3)	(6.5)	154.7
Financial advisor directed (5)	85.4	20.7	(17.5)	3.3	91.9
Separate accounts (6)	110.7	21.6	(20.5)	(1.4)	110.4
Mutual fund advisory (7)	66.9	10.4	(12.2)	(2.2)	62.9
Total advisory client assets	422.8	91.4	(87.5)	(6.8)	419.9

(1) Inflows include new advisory account assets, contributions, dividends and interest.
(2) Outflows include closed advisory account assets, withdrawals and client management fees.
(3) Market impact reflects gains and losses on portfolio investments.
(4) Investment advice and other services are provided to client, but decisions are made by the client and the fees earned are based on a percentage of the advisory account assets, not the number and size of transactions executed by the client.
(5) Professionally managed portfolios with fees earned based on respective strategies and as a percentage of certain client assets.
(6) Professional advisory portfolios managed by Wells Fargo Asset Management advisors or third-party asset managers. Fees are earned based on a percentage of certain client assets.
(7) Program with portfolios constructed of load-waived, no-load and institutional share class mutual funds. Fees are earned based on a percentage of certain client assets.

Trust and Investment Client Assets Under Management

We earn trust and investment management fees from managing and administering assets, including mutual funds, institutional separate accounts, personal trust, employee benefit trust and agency assets through our asset management, wealth and retirement businesses. Our asset management business is conducted by Wells Fargo Asset Management (WFAM), which offers Wells Fargo proprietary mutual funds and manages institutional separate accounts. Our wealth business manages assets for high net worth clients, and our retirement business provides total retirement management, investments, and trust and custody solutions tailored to meet the needs of institutional clients. Substantially all of our trust and investment management fee income is earned from AUM where we have discretionary management authority over the investments and generate fees as a percentage of the market value of the AUM. Table 9f presents AUM activity for the years ended December 31, 2017, 2016 and 2015.

Table 9f: WIM Trust and Investment – Assets Under Management

					Year ended
(in billions)	Balance, beginning of period	Inflows (1)	Outflows (2)	Market impact (3)	Balance, end of period
December 31, 2017					
Assets managed by WFAM (4):					
Money market funds (5)	**$ 102.6**	**5.6**	**—**	**—**	**108.2**
Other assets managed	**379.6**	**116.0**	**(130.9)**	**31.0**	**395.7**
Assets managed by Wealth and Retirement (6)	**168.5**	**41.1**	**(39.4)**	**16.0**	**186.2**
Total assets under management	**650.7**	**162.7**	**(170.3)**	**47.0**	**690.1**
December 31, 2016					
Assets managed by WFAM (4):					
Money market funds (5)	123.6	—	(21.0)	—	102.6
Other assets managed	366.1	114.0	(125.0)	24.5	379.6
Assets managed by Wealth and Retirement (6)	162.1	37.0	(35.9)	5.3	168.5
Total assets under management	651.8	151.0	(181.9)	29.8	650.7
December 31, 2015					
Assets managed by WFAM (4):					
Money market funds (5)	123.1	0.5	—	—	123.6
Other assets managed	372.6	93.5	(97.0)	(3.0)	366.1
Assets managed by Wealth and Retirement (6)	165.3	36.2	(34.1)	(5.3)	162.1
Total assets under management	661.0	130.2	(131.1)	(8.3)	651.8

(1) Inflows include new managed account assets, contributions, dividends and interest.
(2) Outflows include closed managed account assets, withdrawals and client management fees.
(3) Market impact reflects gains and losses on portfolio investments.
(4) Assets managed by WFAM consist of equity, alternative, balanced, fixed income, money market, and stable value, and include client assets that are managed or sub-advised on behalf of other Wells Fargo lines of business.
(5) Money Market funds activity is presented on a net inflow or net outflow basis, because the gross flows are not meaningful nor used by management as an indicator of performance.
(6) Includes \$5.5 billion, \$6.9 billion and \$8.2 billion as of December 31, 2017, 2016 and 2015, respectively, of client assets invested in proprietary funds managed by WFAM.

Balance Sheet Analysis

At December 31, 2017, our assets totaled $2.0 trillion, up $21.6 billion from December 31, 2016. Asset growth was predominantly due to trading assets, which increased $17.9 billion, and investment securities, which increased $8.5 billion. An increase of $29.9 billion in deposits, and total equity growth of $7.6 billion from December 31, 2016, were the predominant sources that funded our asset growth for 2017. Equity growth benefited from a $12.2 billion increase in retained earnings, net of dividends paid.

The following discussion provides additional information about the major components of our balance sheet. Information regarding our capital and changes in our asset mix is included in the "Earnings Performance – Net Interest Income" and "Capital Management" sections and Note 27 (Regulatory and Agency Capital Requirements) to Financial Statements in this Report.

Investment Securities

Table 10: Investment Securities – Summary

	December 31, 2017			December 31, 2016		
(in millions)	**Amortized Cost**	**Net unrealized gain (loss)**	**Fair value**	Amortized Cost	Net unrealized gain (loss)	Fair value
Available-for-sale securities:						
Debt securities	**$ 275,096**	**1,311**	**276,407**	309,447	(2,294)	307,153
Marketable equity securities	**532**	**146**	**678**	706	505	1,211
Total available-for-sale securities	**275,628**	**1,457**	**277,085**	310,153	(1,789)	308,364
Held-to-maturity debt securities	**139,335**	**(350)**	**138,985**	99,583	(428)	99,155
Total investment securities (1)	**$ 414,963**	**1,107**	**416,070**	409,736	(2,217)	407,519

(1) Available-for-sale securities are carried on the balance sheet at fair value. Held-to-maturity securities are carried on the balance sheet at amortized cost.

Table 10 presents a summary of our investment securities portfolio, which increased $8.5 billion from December 31, 2016, predominantly due to net purchases of federal agency mortgage-backed securities.

The total net unrealized gains on available-for-sale securities were $1.5 billion at December 31, 2017, up from net unrealized losses of $1.8 billion at December 31, 2016, primarily due to tighter credit spreads and the transfer of available-for-sale securities to held-to-maturity.

The size and composition of the investment securities portfolio is largely dependent upon the Company's liquidity and interest rate risk management objectives. Our business generates assets and liabilities, such as loans, deposits and long-term debt, which have different maturities, yields, re-pricing, prepayment characteristics and other provisions that expose us to interest rate and liquidity risk. The available-for-sale securities portfolio predominantly consists of liquid, high quality U.S. Treasury and federal agency debt, agency mortgage-backed securities (MBS), privately-issued residential and commercial MBS, securities issued by U.S. states and political subdivisions, corporate debt securities, and highly rated collateralized loan obligations. Due to its highly liquid nature, the available-for-sale securities portfolio can be used to meet funding needs that arise in the normal course of business or due to market stress. Changes in our interest rate risk profile may occur due to changes in overall economic or market conditions, which could influence loan origination demand, prepayment speeds, or deposit balances and mix. In response, the available-for-sale securities portfolio can be rebalanced to meet the Company's interest rate risk management objectives. In addition to meeting liquidity and interest rate risk management objectives, the available-for-sale securities portfolio may provide yield enhancement over other short-term assets. See the "Risk Management – Asset/Liability Management" section in this Report for more information on liquidity and interest rate risk. The held-to-maturity securities portfolio consists of high quality U.S. Treasury debt, securities issued by U.S. states and political subdivisions, agency MBS, asset-backed securities (ABS) primarily collateralized by automobile loans and leases and cash, and collateralized loan obligations where our intent is to hold these securities to maturity and collect the contractual cash flows. The held-to-maturity securities portfolio may also provide yield enhancement over short-term assets.

We analyze securities for other-than-temporary impairment (OTTI) quarterly or more often if a potential loss-triggering event occurs. Of the $606 million in OTTI write-downs recognized in earnings in 2017, $262 million related to debt securities, $5 million related to marketable equity securities, which are included in available-for-sale securities, and $339 million related to nonmarketable equity investments, which are included in other assets. For a discussion of our OTTI accounting policies and underlying considerations and analysis, see Note 1 (Summary of Significant Accounting Policies) and Note 5 (Investment Securities) to Financial Statements in this Report.

At December 31, 2017, investment securities included $57.6 billion of municipal bonds, of which 95.7% were rated "A-" or better based largely on external and, in some cases, internal ratings. Additionally, some of the securities in our total municipal bond portfolio are guaranteed against loss by bond insurers. These guaranteed bonds are predominantly investment grade and were generally underwritten in accordance with our own investment standards prior to the determination to purchase, without relying on the bond insurer's guarantee in making the investment decision. The credit quality of our municipal bond holdings are monitored as part of our ongoing impairment analysis.

The weighted-average expected maturity of debt securities available-for-sale was 6.3 years at December 31, 2017. The expected remaining maturity is shorter than the remaining contractual maturity for the 61.3% of this portfolio that is MBS because borrowers generally have the right to prepay obligations before the underlying mortgages mature. The estimated effects of a 200 basis point increase or decrease in interest rates on the fair value and the expected remaining maturity of the MBS available-for-sale portfolio are shown in Table 11.

Table 11: Mortgage-Backed Securities Available for Sale

(in billions)	Fair value	Net unrealized gain (loss)	Expected remaining maturity (in years)
At December 31, 2017			
Actual	169.4	—	5.9
Assuming a 200 basis point:			
Increase in interest rates	150.8	(18.6)	8.2
Decrease in interest rates	180.4	11.0	3.5

The weighted-average expected maturity of debt securities held-to-maturity was 5.9 years at December 31, 2017. See Note 5 (Investment Securities) to Financial Statements in this Report for a summary of investment securities by security type.

Loan Portfolios

Table 12 provides a summary of total outstanding loans by portfolio segment. Total loans decreased $10.8 billion from December 31, 2016, reflecting paydowns, a continued decline in junior lien mortgage loans, and an expected decline in automobile loans as the effect of tighter underwriting standards implemented in 2016 resulted in lower origination volume.

Table 12: Loan Portfolios

(in millions)	**December 31, 2017**	December 31, 2016
Commercial	**$ 503,388**	506,536
Consumer	**453,382**	461,068
Total loans	**956,770**	967,604
Change from prior year	**$ (10,834)**	51,045

A discussion of average loan balances and a comparative detail of average loan balances is included in Table 5 under "Earnings Performance – Net Interest Income" earlier in this Report. Additional information on total loans outstanding by portfolio segment and class of financing receivable is included in the "Risk Management – Credit Risk Management" section in this Report. Period-end balances and other loan related information are in Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Table 13 shows contractual loan maturities for loan categories normally not subject to regular periodic principal reduction and the contractual distribution of loans in those categories to changes in interest rates.

Table 13: Maturities for Selected Commercial Loan Categories

	December 31, 2017				December 31, 2016			
(in millions)	**Within one year**	**After one year through five years**	**After five years**	**Total**	Within one year	After one year through five years	After five years	Total
Selected loan maturities:								
Commercial and industrial	**$ 105,327**	**201,530**	**26,268**	**333,125**	105,421	199,211	26,208	330,840
Real estate mortgage	**20,069**	**64,384**	**42,146**	**126,599**	22,713	68,928	40,850	132,491
Real estate construction	**9,555**	**13,276**	**1,448**	**24,279**	9,576	13,102	1,238	23,916
Total selected loans	**$ 134,951**	**279,190**	**69,862**	**484,003**	137,710	281,241	68,296	487,247
Distribution of loans to changes in interest rates:								
Loans at fixed interest rates	**$ 18,587**	**30,049**	**26,748**	**75,384**	19,389	29,748	26,859	75,996
Loans at floating/variable interest rates	**116,364**	**249,141**	**43,114**	**408,619**	118,321	251,493	41,437	411,251
Total selected loans	**$ 134,951**	**279,190**	**69,862**	**484,003**	137,710	281,241	68,296	487,247

Deposits

Deposits were $1.3 trillion at December 31, 2017, up $29.9 billion from December 31, 2016, reflecting growth in commercial, consumer and small business banking deposits. Table 14 provides additional information regarding deposits.

Information regarding the impact of deposits on net interest income and a comparison of average deposit balances is provided in "Earnings Performance – Net Interest Income" and Table 5 earlier in this Report.

Table 14: Deposits

($ in millions)	Dec 31, 2017	% of total deposits	Dec 31, 2016	% of total deposits	% Change
Noninterest-bearing	$ 373,722	28%	$ 375,967	29%	(1)
Interest-bearing checking	51,928	4	49,403	4	5
Market rate and other savings	690,168	52	687,846	52	—
Savings certificates	20,415	2	23,968	2	(15)
Other time deposits	71,715	4	52,649	4	36
Deposits in foreign offices (1)	128,043	10	116,246	9	10
Total deposits	$ 1,335,991	100%	$ 1,306,079	100%	2

(1) Includes Eurodollar sweep balances of $80.1 billion and $74.8 billion at December 31, 2017 and 2016, respectively.

Equity

Total equity was $208.1 billion at December 31, 2017, compared with $200.5 billion at December 31, 2016. The increase was largely driven by a $12.2 billion increase in retained earnings from earnings net of dividends paid, and a $1.0 billion increase in cumulative other comprehensive income, partially offset by a net increase in treasury stock.

Off-Balance Sheet Arrangements

In the ordinary course of business, we engage in financial transactions that are not recorded on the balance sheet, or may be recorded on the balance sheet in amounts that are different from the full contract or notional amount of the transaction. Our off-balance sheet arrangements include commitments to lend and purchase securities, transactions with unconsolidated entities, guarantees, derivatives, and other commitments. These transactions are designed to (1) meet the financial needs of customers, (2) manage our credit, market or liquidity risks, and/or (3) diversify our funding sources.

Commitments to Lend and Purchase Securities

We enter into commitments to lend funds to customers, which are usually at a stated interest rate, if funded, and for specific purposes and time periods. When we make commitments, we are exposed to credit risk. However, the maximum credit risk for these commitments will generally be lower than the contractual amount because a significant portion of these commitments is expected to expire without being used by the customer. For more information on lending commitments, see Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report. We may enter into commitments to purchase securities under resale agreements. For more information, see Note 4 (Federal Funds Sold, Securities Purchased under Resale Agreements and Other Short-Term Investments) to Financial Statements in this Report. We also may enter into commitments to purchase debt and equity securities to provide capital for customers' funding, liquidity or other future needs. For more information, see Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments) to Financial Statements in this Report.

Transactions with Unconsolidated Entities

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with special purpose entities (SPEs), which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. Generally, SPEs are formed in connection with securitization transactions and are considered variable interest entities (VIEs). For more information on securitizations, including sales proceeds and cash flows from securitizations, see Note 8 (Securitizations and Variable Interest Entities) to Financial Statements in this Report.

Guarantees and Certain Contingent Arrangements

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in an underlying asset, liability, rate or index. Guarantees are generally in the form of standby letters of credit, securities lending and other indemnifications, written put options, recourse obligations and other types of arrangements. For more information on guarantees and certain contingent arrangements, see Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments) to Financial Statements in this Report.

Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. Derivatives are recorded on the balance sheet at fair value, and volume can be measured in terms of the notional amount, which is generally not exchanged, but is used only as the basis on which interest and other payments are determined. The notional amount is not recorded on the balance sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. For more information on derivatives, see Note 16 (Derivatives) to Financial Statements in this Report.

Contractual Cash Obligations

In addition to the contractual commitments and arrangements previously described, which, depending on the nature of the obligation, may or may not require use of our resources, we enter into other contractual obligations that may require future cash payments in the ordinary course of business, including debt issuances for the funding of operations and leases for premises and equipment.

Table 15 summarizes these contractual obligations as of December 31, 2017, excluding the projected cash payments for obligations for short-term borrowing arrangements and pension and postretirement benefit plans. More information on those obligations is in Note 12 (Short-Term Borrowings) and Note 21 (Employee Benefits and Other Expenses) to Financial Statements in this Report.

Table 15: Contractual Cash Obligations

							December 31, 2017
(in millions)	Note(s) to Financial Statements	Less than 1 year	1-3 years	3-5 years	More than 5 years	Indeterminate maturity	Total
Contractual payments by period:							
Deposits (1)	11	$ 106,089	11,988	5,002	5,515	1,207,397	1,335,991
Long-term debt (2)	13	39,826	47,730	46,222	91,242	—	225,020
Interest (3)		5,803	8,640	6,231	23,874	—	44,548
Operating leases	7	1,172	2,056	1,381	1,976	—	6,585
Unrecognized tax obligations	22	20	—	—	—	3,505	3,525
Commitments to purchase debt and equity securities (4)	14	2,132	296	—	—	—	2,428
Purchase and other obligations (5)		863	662	128	43	—	1,696
Total contractual obligations		$ 155,905	71,372	58,964	122,650	1,210,902	1,619,793

(1) Includes interest-bearing and noninterest-bearing checking, and market rate and other savings accounts.
(2) Balances are presented net of unamortized debt discounts and premiums and purchase accounting adjustments.
(3) Represents the future interest obligations related to interest-bearing time deposits and long-term debt in the normal course of business including a net reduction of \$9.7 billion related to hedges used to manage interest rate risk. These interest obligations assume no early debt redemption. We estimated variable interest rate payments using December 31, 2017, rates, which we held constant until maturity. We have excluded interest related to structured notes where our payment obligation is contingent on the performance of certain benchmarks.
(4) Includes unfunded commitments to purchase debt and equity investments, excluding trade date payables, of \$194 million and \$2.2 billion, respectively. Our unfunded equity commitments include certain investments subject to the Volcker Rule, which we expect to divest in the near future. For additional information regarding the Volcker Rule, see the "Regulatory Matters" section in this Report. We have presented predominantly all of our contractual obligations on equity investments above in the maturing in less than one year category as there are no specified contribution dates in the agreements. These obligations may be requested at any time by the investment manager.
(5) Represents agreements related to unrecognized obligations to purchase goods or services.

We are subject to the income tax laws of the U.S., its states and municipalities, and those of the foreign jurisdictions in which we operate. We have various unrecognized tax obligations related to these operations that may require future cash tax payments to various taxing authorities. Because of their uncertain nature, the expected timing and amounts of these payments generally are not reasonably estimable or determinable. We attempt to estimate the amount payable in the next 12 months based on the status of our tax examinations and settlement discussions. See Note 22 (Income Taxes) to Financial Statements in this Report for more information.

Transactions with Related Parties

The Related Party Disclosures topic of the Accounting Standards Codification (ASC) 850 requires disclosure of material related party transactions, other than compensation arrangements, expense allowances and other similar items in the ordinary course of business. Based on ASC 850, we had no transactions required to be reported for the years ended December 31, 2017, 2016 and 2015. The Company has included within its disclosures information on its equity investments, relationships with variable interest entities, and employee benefit plan arrangements. See Note 7 (Premises, Equipment, Lease Commitments and Other Assets), Note 8 (Securitizations and Variable Interest Entities) and Note 21 (Employee Benefits and Other Expenses) to Financial Statements in this Report.

Risk Management

Wells Fargo manages a variety of risks that can significantly affect our financial performance and our ability to meet the expectations of our customers, stockholders, regulators and other stakeholders. Among the significant risks that we manage are conduct risk, operational risk, compliance risk, credit risk, and asset/liability management related risks, which include interest rate risk, market risk, liquidity risk, and funding related risks. We operate under a Board-level approved risk framework which outlines our company-wide approach to risk management and oversight, and describes the structures and practices employed to manage current and emerging risks inherent to Wells Fargo.

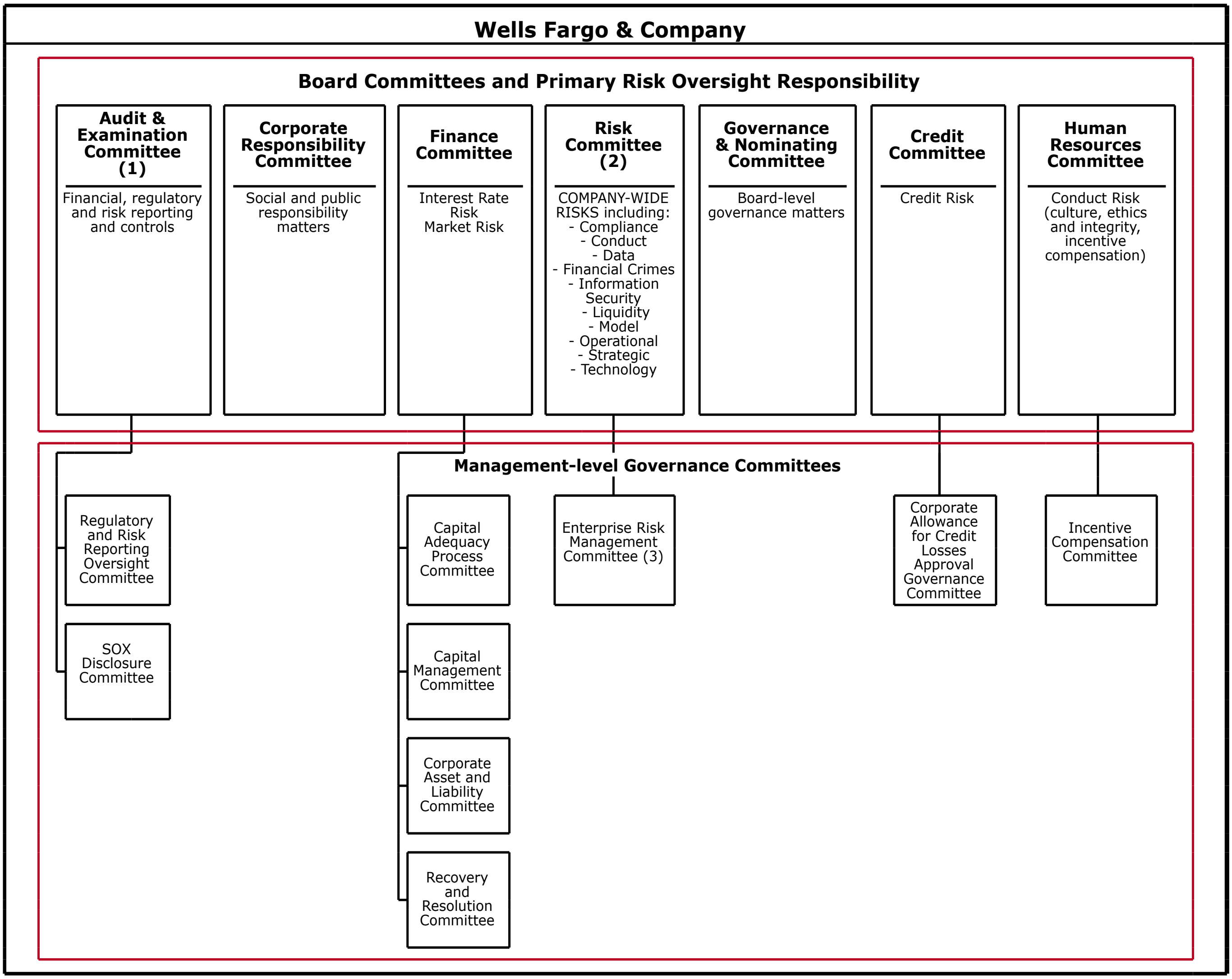
Risk Framework
Our risk framework consists of three lines of defense – (1) Wells Fargo's lines of business and certain other enterprise functions, (2) Corporate Risk, our Company's primary second-line of defense led by our Chief Risk Officer who reports to the Board's Risk Committee, and (3) Wells Fargo Audit Services, our internal audit function which is led by our Chief Auditor who reports to the Board's Audit & Examination Committee. The Company's primary risk management objectives are: (a) to support the Board as it carries out its risk oversight responsibilities; (b) to support members of senior management in achieving the Company's strategic objectives and priorities by establishing a comprehensive and effective risk framework and enterprise risk inventory; and (c) to maintain and continually promote a strong culture, which emphasizes each team member's responsibility and authority as a risk manager. Key elements of our risk program include:

- Cultivating a **strong culture**, with key risk management components emphasizing each team member's ownership of risk and the Company's bias for conservatism through which we strive to maintain a conservative financial position measured by satisfactory asset quality, capital levels, funding sources, and diversity of revenues.
- Defining and communicating across the Company a **company-wide statement of risk appetite (or, risk tolerance)** which serves to guide business and risk leaders as they manage risk on a daily basis. The company-wide statement of risk appetite describes the nature and magnitude of risk that Wells Fargo is willing to assume in pursuit of its strategic and business objectives.
- Maintaining a **risk management governance structure,** including escalation protocols and a committee structure, that enables the comprehensive oversight of the Company's risk program and the effective and efficient escalation of risk issues to the appropriate level of the Company for information and decision-making.
- Maintaining an **enterprise risk inventory** and promoting a standardized and systematic process to identify risks across the Company to guide business decisions and capital planning efforts.
- Designing **risk frameworks, programs, policies, procedures, controls, processes, and practices** that are effective and aligned, and facilitate the active and timely management of current and emerging risks across the Company.
- Structuring an **effective and independent Corporate Risk function** whose primary responsibilities include: (a) establishing and maintaining an effective risk framework, (b) maintaining an independent and comprehensive perspective on the Company's current and emerging risks, (c) independently opining on the strategy and performance of the Company's risk taking activities, (d) credibly challenging the intended business and risk management actions of Wells Fargo's first-line of defense, and (e) reviewing risk management programs and practices across the Company to confirm appropriate coordination and consistency in the application of effective risk management approaches.
- Maintaining an **independent internal audit function** that is primarily responsible for adopting a systematic, disciplined approach to evaluating the effectiveness of risk management, control and governance processes and activities as well as evaluating risk framework adherence to relevant regulatory guidelines and appropriateness for Wells Fargo's size and risk profile.

The Board and the management-level Operating Committee (composed of direct reports to the CEO and President, including the Chief Risk Officer and Chief Auditor who report to the CEO administratively, and to their respective Board committees functionally) have overall and ultimate responsibility to provide oversight for our three lines of defense and the risks we take, and carry out their oversight through governance committees with specific risk management responsibilities described below.

Board and Management-level Committee Structure
Wells Fargo's Board and management-level governance committee structure is designed to ensure that key risks are considered and, if necessary, decided upon at the appropriate level of the Company and by the appropriate mix of executives. Accordingly, the structure is composed of defined escalation and reporting paths from first-line of defense groups to second-line of defense independent risk and management-level governance committees and, ultimately, to the Board level as appropriate. Each Board and management-level governance committee has defined authorities and responsibilities for considering a specific set of risks, as outlined in each of their charters. Our Board and management-level governance committee structure, and their primary risk oversight responsibilities, is presented in Table 16.

Table 16: Board and Management-level Governance Committee Structure



(1) The Audit & Examination Committee additionally oversees the internal audit function, external auditor performance, and the disclosure framework for financial, regulatory and risk reports prepared for the Board, management, and bank regulatory agencies, and assists the Board in its oversight of the Company's compliance with legal and regulatory requirements.
(2) The Risk Committee has formed a compliance subcommittee and a technology subcommittee to provide more focused oversight of those risks.
(3) Certain committees that report to the Enterprise Risk Management Committee have dual escalation and informational reporting paths to Board-level committees.

Board Oversight of Risk

The business and affairs of the Company are managed under the direction of the Board, whose responsibilities include overseeing the Company's risk management structure. The Board carries out its risk oversight responsibilities directly and through the work of its seven standing committees, which all report to the full Board. Each Board committee works closely with management to understand and oversee the Company's key risk exposures.

The Risk Committee oversees company-wide risks. The Board's other standing committees also have primary oversight responsibility for certain specific risk matters, as highlighted in Table 16.

The Risk Committee additionally oversees the Company's Corporate Risk function and plays an active role in approving and overseeing the Company's company-wide risk management framework established by management to manage risk. The Risk Committee and the full Board review and approve the enterprise statement of risk appetite annually, and the Risk Committee also actively monitors the risk profile relative to the approved risk appetite.

The full Board receives reports at each of its meetings from the Board committee chairs about committee activities, including risk oversight matters, and the Risk Committee receives a quarterly report from the management-level Enterprise Risk Management Committee regarding current or emerging risk matters.

Management Oversight of Risk

In addition to the Board committees that oversee the Company's risk management framework, the Company has established several management-level governance committees to support Wells Fargo leaders in carrying out their risk management responsibilities. Each risk-focused governance committee has a defined set of authorities and responsibilities specific to one or more risk types. The risk governance committee structure is designed so that significant risks are considered and, if necessary, decided upon at the appropriate level of the Company and by the appropriate mix of executives.

The Enterprise Risk Management Committee, chaired by the Company's Chief Risk Officer (CRO), oversees the management of all risk types across the Company. The

Enterprise Risk Management Committee reports to the Board's Risk Committee, and serves as the focal point for risk governance and oversight at the management level.

Corporate Risk develops our enterprise statement of risk appetite in the context of our risk management framework described above. As part of Wells Fargo's risk appetite, we maintain metrics along with associated objectives to measure and monitor the amount of risk that the Company is prepared to take. Actual results of these metrics are reported to the Enterprise Risk Management Committee on a quarterly basis as well as to the Board's Risk Committee. Our operating segments also have business-specific risk appetite statements based on the enterprise statement of risk appetite. The metrics included in the operating segment statements are harmonized with the enterprise level metrics to ensure consistency where appropriate. Business lines also maintain metrics and qualitative statements that are unique to their line of business. This allows for monitoring of risk and definition of risk appetite deeper within the organization.

While the Enterprise Risk Management Committee and the committees that report to it serve as the focal point for the management of company-wide risk matters, the management of specific risk types is supported by additional management-level governance committees, which all report to at least one of the Board's standing committees.

The Company's management-level governance committees collectively help management facilitate company-wide understanding and monitoring of risks and challenges faced by the Company.

The Corporate Risk organization, which is the Company's primary second-line of defense, is headed by the Company's Chief Risk Officer who, among other things, is responsible for setting the strategic direction and driving the execution of Wells Fargo's risk management activities.

The Chief Risk Officer, as well as the Chief Risk Officer's direct reports, work closely with the Board's committees and frequently provide reports and updates to the committees and the committee chairs on risk matters during and outside of regular committee meetings, as appropriate.

Conduct Risk Management

Conduct risk is the risk resulting from behavior that does not comply with the Company's values or ethical principles.

Our Board has enhanced its oversight of conduct risk to oversee the alignment of team member conduct to the Company's risk appetite (which the Board approves annually) and culture as reflected in our *Vision, Values and Goals* and Code of Ethics and Business Conduct. The Board's Risk Committee has primary oversight responsibility for company-wide conduct risk, while certain other Board committees have primary oversight responsibility for specific components of conduct risk. For example, the conduct risk oversight responsibilities of the Board's Human Resources Committee include the Company's human capital management, company-wide culture, the Ethics Oversight program (including the Company's Code of Ethics and Business Conduct), and oversight of our company-wide incentive compensation risk management program.

At the management level, the new Conduct Management Office has primary oversight responsibility for key elements of conduct risk, including internal investigations, sales practices oversight, complaints oversight, and ethics oversight. This office reports and is accountable to the CRO and the Enterprise Risk Management Committee and also has direct escalation and informational reporting paths to the relevant Board committees.

Operational Risk Management

Operational risk is the risk resulting from inadequate or failed internal controls and processes, people and systems, or resulting from external events. Operational risk is inherent in all Wells Fargo products and services as it often arises in the presence of other risk types.

The Board's Risk Committee has primary oversight responsibility for all aspects of operational risk. In this capacity, it reviews and approves significant supporting operational risk policies and programs, including the Company's business continuity, financial crimes, information security, privacy, technology, and third-party risk management policies and programs. In addition, it periodically reviews updates from management on the overall state of operational risk, including all related programs and risk types.

At the management level, the Operational Risk Group has primary oversight responsibility for operational risk. This group reports and is accountable to the CRO and the Enterprise Risk Management Committee, and existing management-level committees with primary oversight responsibility for key elements of operational risk report to it while maintaining relevant dual escalation and informational reporting paths to Board-level committees.

Information security is a significant operational risk for financial institutions such as Wells Fargo, and includes the risk of losses resulting from cyber attacks. Wells Fargo and other financial institutions continue to be the target of various evolving and adaptive cyber attacks, including malware and denial-of-service, as part of an effort to disrupt the operations of financial institutions, potentially test their cybersecurity capabilities, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting the infrastructure of the internet, causing the widespread unavailability of websites and degrading website performance. Wells Fargo has not experienced any material losses relating to these or other cyber attacks. Addressing cybersecurity risks is a priority for Wells Fargo, and we continue to develop and enhance our controls, processes and systems in order to protect our networks, computers, software and data from attack, damage or unauthorized access. We are also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to cybersecurity threats. See the "Risk Factors" section in this Report for additional information regarding the risks associated with a failure or breach of our operational or security systems or infrastructure, including as a result of cyber attacks.

Compliance Risk Management

Compliance risk is the risk resulting from the failure to comply with applicable laws, regulations, rules, or other regulatory requirements, or the failure to appropriately address and limit violations of law and any associated harm to customers. Compliance risk encompasses compliance with the applicable standards of self-regulatory organizations as well as with internal policies and procedures.

The Board's Risk Committee has primary oversight responsibility for compliance risk. In this capacity, it periodically receives updates and reports from management on the state of compliance risk in the Company.

At the management level, Wells Fargo Compliance has primary oversight responsibility for compliance risk. This management-level organization reports and is accountable to the CRO and the Enterprise Risk Management Committee and also has a direct escalation and information reporting path to the

Board's Risk Committee. We continue to enhance our oversight of operational and compliance risk management, including as required by the FRB's February 2, 2018 consent order.

Credit Risk Management

We define credit risk as the risk of loss associated with a borrower or counterparty default (failure to meet obligations in accordance with agreed upon terms). Credit risk exists with many of our assets and exposures such as debt security holdings, certain derivatives, and loans. The following discussion focuses on our loan portfolios, which represent the largest component of assets on our balance sheet for which we have credit risk.

Table 17 presents our total loans outstanding by portfolio segment and class of financing receivable.

Table 17: Total Loans Outstanding by Portfolio Segment and Class of Financing Receivable

(in millions)	Dec 31, 2017	Dec 31, 2016
Commercial:		
Commercial and industrial	$ 333,125	330,840
Real estate mortgage	126,599	132,491
Real estate construction	24,279	23,916
Lease financing	19,385	19,289
Total commercial	503,388	506,536
Consumer:		
Real estate 1-4 family first mortgage	284,054	275,579
Real estate 1-4 family junior lien mortgage	39,713	46,237
Credit card	37,976	36,700
Automobile	53,371	62,286
Other revolving credit and installment	38,268	40,266
Total consumer	453,382	461,068
Total loans	$ 956,770	967,604

We manage our credit risk by establishing what we believe are sound credit policies for underwriting new business, while monitoring and reviewing the performance of our existing loan portfolios. We employ various credit risk management and monitoring activities to mitigate risks associated with multiple risk factors affecting loans we hold, could acquire or originate including:

- Loan concentrations and related credit quality
- Counterparty credit risk
- Economic and market conditions
- Legislative or regulatory mandates
- Changes in interest rates
- Merger and acquisition activities
- Reputation risk

Our credit risk management oversight process is governed centrally, but provides for decentralized management and accountability by our lines of business. Our overall credit process includes comprehensive credit policies, disciplined credit underwriting, frequent and detailed risk measurement and modeling, extensive credit training programs, and a continual loan review and audit process.

A key to our credit risk management is adherence to a well-controlled underwriting process, which we believe is appropriate for the needs of our customers as well as investors who purchase the loans or securities collateralized by the loans.

Credit Quality Overview Credit quality improved in 2017, as our net charge-off rate remained low at 0.31% of average total loans. We continued to benefit from improvements in the performance of our residential real estate portfolio along with lower losses in our oil and gas portfolio. In particular:

- Nonaccrual loans were $8.0 billion at December 31, 2017, down from $10.4 billion at December 31, 2016. Commercial nonaccrual loans declined to $2.6 billion at December 31, 2017, compared with $4.1 billion at December 31, 2016, and consumer nonaccrual loans declined to $5.4 billion at December 31, 2017, compared with $6.3 billion at December 31, 2016. The decline reflected an improved housing market and continued improvement in our oil and gas portfolio. Nonaccrual loans represented 0.84% of total loans at December 31, 2017, compared with 1.07% at December 31, 2016.
- Net charge-offs as a percentage of average total loans declined to 0.31% in 2017, compared with 0.37% in 2016. Net charge-offs as a percentage of our average commercial and consumer portfolios were 0.09% and 0.55% in 2017, respectively, compared with 0.22% and 0.53%, respectively, in 2016.
- Loans that are not government insured/guaranteed and 90 days or more past due and still accruing were $49 million and $1.0 billion in our commercial and consumer portfolios, respectively, at December 31, 2017, compared with $64 million and $908 million at December 31, 2016.
- Our provision for credit losses was $2.5 billion during 2017, compared with $3.8 billion in 2016.
- The allowance for credit losses declined to $12.0 billion, or 1.25% of total loans, at December 31, 2017, compared with $12.5 billion, or 1.30%, at December 31, 2016.

Additional information on our loan portfolios and our credit quality trends follows.

PURCHASED CREDIT-IMPAIRED (PCI) LOANS Loans acquired with evidence of credit deterioration since their origination and where it is probable that we will not collect all contractually required principal and interest payments are PCI loans. Substantially all of our PCI loans were acquired in the Wachovia acquisition on December 31, 2008. PCI loans are recorded at fair value at the date of acquisition, and the historical allowance for credit losses related to these loans is not carried over. The carrying value of PCI loans at December 31, 2017, totaled $12.8 billion, compared with $16.7 billion at December 31, 2016, and $58.8 billion at December 31, 2008. The decrease from December 31, 2016, was due in part to prepayments observed in our Pick-a-Pay PCI portfolio, as well as the sale of $569 million of Pick-a-Pay PCI loans in second quarter 2017. PCI loans are considered to be accruing due to the existence of the accretable yield amount, which represents the cash expected to be collected in excess of their carrying value, and not based on consideration given to contractual interest payments. The accretable yield at December 31, 2017, was $8.9 billion.

A nonaccretable difference is established for PCI loans to absorb losses expected on the contractual amounts of those loans in excess of the fair value recorded at the date of acquisition. Amounts absorbed by the nonaccretable difference do not affect the income statement or the allowance for credit losses. At December 31, 2017, $474 million in nonaccretable difference remained to absorb losses on PCI loans.

For additional information on PCI loans, see the "Risk Management – Credit Risk Management – Real Estate 1-4 Family First and Junior Lien Mortgage Loans – Pick-a-Pay Portfolio" section of this Report, Note 1 (Summary of Significant Accounting Policies) and Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Significant Loan Portfolio Reviews Measuring and monitoring our credit risk is an ongoing process that tracks delinquencies, collateral values, Fair Isaac Corporation (FICO) scores, economic trends by geographic areas, loan-level risk grading for certain portfolios (typically commercial) and other indications of credit risk. Our credit risk monitoring process is designed to enable early identification of developing risk and to support our determination of an appropriate allowance for credit losses. The following discussion provides additional characteristics and analysis of our significant portfolios. See Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report for more analysis and credit metric information for each of the following portfolios.

COMMERCIAL AND INDUSTRIAL LOANS AND LEASE FINANCING For purposes of portfolio risk management, we aggregate commercial and industrial loans and lease financing according to market segmentation and standard industry codes. We generally subject commercial and industrial loans and lease financing to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to regulatory definitions of pass and criticized categories with criticized divided between special mention, substandard, doubtful and loss categories.

The commercial and industrial loans and lease financing portfolio totaled $352.5 billion, or 37% of total loans, at December 31, 2017. The net charge-off rate for this portfolio was 0.15% in 2017 compared with 0.35% in 2016. At December 31, 2017, 0.56% of this portfolio was nonaccruing, compared with 0.95% at December 31, 2016, reflecting a decrease of $1.4 billion in nonaccrual loans, predominantly due to improvement in the oil and gas portfolio. Also, $17.9 billion of the commercial and industrial loan and lease financing portfolio was internally classified as criticized in accordance with regulatory guidance at December 31, 2017, compared with $24.0 billion at December 31, 2016. The decrease in criticized loans, which also includes the decrease in nonaccrual loans, was primarily due to improvement in the oil and gas portfolio.

Most of our commercial and industrial loans and lease financing portfolio is secured by short-term assets, such as accounts receivable, inventory and securities, as well as long-lived assets, such as equipment and other business assets. Generally, the collateral securing this portfolio represents a secondary source of repayment.

Table 18 provides a breakout of commercial and industrial loans and lease financing by industry, and includes $61.2 billion of foreign loans at December 31, 2017. Foreign loans totaled $19.2 billion within the investors category, $18.4 billion within the financial institutions category and $1.4 billion within the oil and gas category.

The investors category includes loans to special purpose vehicles (SPVs) formed by sponsoring entities to invest in financial assets backed predominantly by commercial and residential real estate or corporate cash flow, and are repaid from the asset cash flows or the sale of assets by the SPV. We limit loan amounts to a percentage of the value of the underlying assets, as determined by us, based on analysis of underlying credit risk and other factors such as asset duration and ongoing performance.

We provide financial institutions with a variety of relationship focused products and services, including loans supporting short-term trade finance and working capital needs. The $18.4 billion of foreign loans in the financial institutions category were predominantly originated by our Financial Institutions business.

The oil and gas loan portfolio totaled $12.5 billion, or 1% of total outstanding loans at December 31, 2017, compared with $14.8 billion, or 2% of total outstanding loans at December 31, 2016. Oil and gas nonaccrual loans decreased to $1.1 billion at December 31, 2017, compared with $2.4 billion at December 31, 2016, due to improved portfolio performance.

Table 18: Commercial and Industrial Loans and Lease Financing by Industry (1)

				December 31, 2017	
(in millions)		Nonaccrual loans	Total portfolio	(2)	% of total loans
Investors	$	11	61,851		6%
Financial institutions		2	40,771		4
Cyclical retailers		78	26,334		3
Healthcare		49	17,255		2
Food and beverage		9	16,627		2
Real estate lessor		8	15,140		2
Industrial equipment		153	14,950		2
Technology		38	13,475		1
Oil and gas		1,092	12,483		1
Transportation		139	9,053		1
Public administration		20	8,839		1
Business services		31	8,604		1
Other		345	107,128	(3)	11
Total	$	1,975	352,510		37%

(1) Industry categories are based on the North American Industry Classification System and the amounts reported include foreign loans. See Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report for a breakout of commercial foreign loans.
(2) Includes $86 million PCI loans, which are considered to be accruing due to the existence of the accretable yield and not based on consideration given to contractual interest payments.
(3) No other single industry had total loans in excess of $6.9 billion.

Risk mitigation actions, including the restructuring of repayment terms, securing collateral or guarantees, and entering into extensions, are based on a re-underwriting of the loan and our assessment of the borrower's ability to perform under the agreed-upon terms. Extension terms generally range from six to thirty-six months and may require that the borrower provide additional economic support in the form of partial repayment, or additional collateral or guarantees. In cases where the value of collateral or financial condition of the borrower is insufficient to repay our loan, we may rely upon the support of an outside repayment guarantee in providing the extension.

Our ability to seek performance under a guarantee is directly related to the guarantor's creditworthiness, capacity and willingness to perform, which is evaluated on an annual basis, or more frequently as warranted. Our evaluation is based on the most current financial information available and is focused on various key financial metrics, including net worth, leverage, and current and future liquidity. We consider the guarantor's reputation, creditworthiness, and willingness to work with us based on our analysis as well as other lenders' experience with the guarantor. Our assessment of the guarantor's credit strength is reflected in our loan risk ratings for such loans. The loan risk rating and accruing status are important factors in our allowance methodology.

In considering the accrual status of the loan, we evaluate the collateral and future cash flows as well as the anticipated support of any repayment guarantor. In many cases, the strength of the guarantor provides sufficient assurance that full repayment of the loan is expected. When full and timely collection of the loan becomes uncertain, including the performance of the guarantor, we place the loan on nonaccrual status. As appropriate, we also charge the loan down in accordance with our charge-off policies, generally to the net realizable value of the collateral securing the loan, if any.

COMMERCIAL REAL ESTATE (CRE) We generally subject CRE loans to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to regulatory definitions of pass and criticized categories with criticized divided among special mention, substandard, doubtful and loss categories. The CRE portfolio, which included $8.7 billion of foreign CRE loans, totaled $150.9 billion, or 16% of total loans, at December 31, 2017, and consisted of $126.6 billion of mortgage loans and $24.3 billion of construction loans.

Table 19 summarizes CRE loans by state and property type with the related nonaccrual totals. The portfolio is diversified both geographically and by property type. The largest geographic concentrations of CRE loans are in California, New York, Texas and Florida, which combined represented 49% of the total CRE portfolio. By property type, the largest concentrations are office buildings at 28% and apartments at 16% of the portfolio. CRE nonaccrual loans totaled 0.4% of the CRE outstanding balance at December 31, 2017, compared with 0.5% at December 31, 2016. At December 31, 2017, we had $4.3 billion of criticized CRE mortgage loans, compared with $5.4 billion at December 31, 2016, and $298 million of criticized CRE construction loans, compared with $461 million at December 31, 2016.

Table 19: CRE Loans by State and Property Type

								December 31, 2017
	Real estate mortgage		Real estate construction		Total			
(in millions)	Nonaccrual loans	Total portfolio	Nonaccrual loans	Total portfolio	Nonaccrual loans	Total portfolio		% of total loans
By state:								
California	$ 132	35,773	2	4,073	134	39,846		4%
New York	11	10,087	—	2,789	11	12,876		1
Texas	95	8,941	—	1,999	95	10,940		1
Florida	49	7,838	2	1,979	51	9,817		1
North Carolina	27	3,947	6	879	33	4,826		1
Georgia	16	3,699	1	881	17	4,580		*
Arizona	25	3,854	—	593	25	4,447		*
Virginia	10	3,283	—	1,000	10	4,283		*
Illinois	5	3,482	—	469	5	3,951		*
Washington	18	3,115	—	568	18	3,683		*
Other	240	42,580	26	9,049	266	51,629	(1)	5
Total	$ 628	126,599	37	24,279	665	150,878		16%
By property:								
Office buildings	$ 130	39,400	2	3,282	132	42,682		4%
Apartments	19	15,067	—	8,543	19	23,610		2
Industrial/warehouse	127	15,672	—	1,884	127	17,556		2
Retail (excluding shopping center)	85	16,464	—	605	85	17,069		2
Shopping center	12	11,855	—	1,274	12	13,129		1
Hotel/motel	21	9,229	—	1,817	21	11,046		1
Real estate - other	92	6,760	2	173	94	6,933		1
Institutional	55	3,276	—	1,651	55	4,927		*
Agriculture	35	2,572	—	22	35	2,594		*
1-4 family structure	—	10	13	2,410	13	2,420		*
Other	52	6,294	20	2,618	72	8,912		1
Total	$ 628	126,599	37	24,279	665	150,878		16%

* Less than 1%.
(1) Includes 40 states; no state had loans in excess of $3.5 billion.

FOREIGN LOANS AND COUNTRY RISK EXPOSURE We classify loans for financial statement and certain regulatory purposes as foreign primarily based on whether the borrower's primary address is outside of the United States. At December 31, 2017, foreign loans totaled $70.4 billion, representing approximately 7% of our total consolidated loans outstanding, compared with $65.7 billion, or approximately 7% of total consolidated loans outstanding, at December 31, 2016. Foreign loans were approximately 4% of our consolidated total assets at December 31, 2017, and 3% at December 31, 2016.

Our country risk monitoring process incorporates frequent dialogue with our financial institution customers, counterparties and regulatory agencies, enhanced by centralized monitoring of macroeconomic and capital markets conditions in the respective countries. We establish exposure limits for each country through a centralized oversight process based on customer needs, and in consideration of relevant economic, political, social, legal, and transfer risks. We monitor exposures closely and adjust our country limits in response to changing conditions.

We evaluate our individual country risk exposure based on our assessment of the borrower's ability to repay, which gives consideration for allowable transfers of risk such as guarantees and collateral and may be different from the reporting based on the borrower's primary address. Our largest single foreign country exposure based on our assessment of risk at December 31, 2017, was the United Kingdom, which totaled

$28.4 billion, or approximately 1% of our total assets, and included $5.0 billion of sovereign claims. Our United Kingdom sovereign claims arise predominantly from deposits we have placed with the Bank of England pursuant to regulatory requirements in support of our London branch. The United Kingdom officially announced its intention to leave the European Union (Brexit) on March 29, 2017, starting the two-year negotiation process leading to its departure. We continue to conduct assessments and are executing our implementation plans to ensure we can continue to prudently serve our customers post-Brexit.

Table 20 provides information regarding our top 20 exposures by country (excluding the U.S.) and our Eurozone exposure, based on our assessment of risk, which gives consideration to the country of any guarantors and/or underlying collateral. Our exposure to Puerto Rico (considered part of U.S. exposure) is predominantly through automobile lending and was not material to our consolidated country exposure.

Table 20: Select Country Exposures

									December 31, 2017
	Lending (1)		Securities (2)		Derivatives and other (3)		Total exposure		
(in millions)	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign (4)	Total
Top 20 country exposures:									
United Kingdom	$ 4,986	20,828	—	1,807	7	792	4,993	23,427	28,420
Canada	31	17,429	196	273	—	427	227	18,129	18,356
Germany	4,323	1,703	8	12	8	397	4,339	2,112	6,451
Cayman Islands	—	5,732	—	—	—	213	—	5,945	5,945
Ireland	—	3,543	—	97	—	178	—	3,818	3,818
Bermuda	—	3,141	—	81	—	191	—	3,413	3,413
China	—	2,961	(1)	154	24	34	23	3,149	3,172
Netherlands	—	2,337	77	358	1	189	78	2,884	2,962
India	—	2,341	—	133	—	—	—	2,474	2,474
Luxembourg	—	1,162	—	664	—	168	—	1,994	1,994
Australia	—	1,575	—	121	—	75	—	1,771	1,771
Chile	—	1,674	—	55	—	—	—	1,729	1,729
Guernsey	—	1,609	—	15	—	3	—	1,627	1,627
Brazil	—	1,569	(1)	14	—	1	(1)	1,584	1,583
France	—	971	—	96	—	214	—	1,281	1,281
Japan	297	921	5	(17)	—	55	302	959	1,261
South Korea	—	1,174	(5)	68	1	7	(4)	1,249	1,245
Jersey, C.I.	—	662	—	451	—	15	—	1,128	1,128
Switzerland	—	998	—	95	—	27	—	1,120	1,120
Mexico	103	958	—	5	—	2	103	965	1,068
Total top 20 country exposures	$ 9,740	73,288	279	4,482	41	2,988	10,060	80,758	90,818
Eurozone exposure:									
Eurozone countries included in Top 20 above (5)	$ 4,323	9,716	85	1,227	9	1,146	4,417	12,089	16,506
Austria	—	571	—	—	—	1	—	572	572
Spain	—	401	—	29	—	23	—	453	453
Belgium	—	295	—	(42)	—	6	—	259	259
Other Eurozone countries (6)	24	245	8	57	—	—	32	302	334
Total Eurozone exposure	$ 4,347	11,228	93	1,271	9	1,176	4,449	13,675	18,124

(1) Lending exposure includes funded loans and unfunded commitments, leveraged leases, and money market placements presented on a gross basis prior to the deduction of impairment allowance and collateral received under the terms of the credit agreements. For the countries listed above, there are $551 million in defeased leases secured significantly by U.S. Treasury and government agency securities.

(2) Represents exposure on debt and equity securities of foreign issuers. Long and short positions are netted and net short positions are reflected as negative exposure.

(3) Represents counterparty exposure on foreign exchange and derivative contracts, and securities resale and lending agreements. This exposure is presented net of counterparty netting adjustments and reduced by the amount of cash collateral. It includes credit default swaps (CDS) predominantly used for market making activities in the U.S. and London based trading businesses, which sometimes results in selling and purchasing protection on the identical reference entities. Generally, we do not use market instruments such as CDS to hedge the credit risk of our investment or loan positions, although we do use them to manage risk in our trading businesses. At December 31, 2017, the gross notional amount of our CDS sold that reference assets in the Top 20 or Eurozone countries was $287 million, which was offset by the notional amount of CDS purchased of $497 million. We did not have any CDS purchased or sold that reference pools of assets that contain sovereign debt or where the reference asset was solely the sovereign debt of a foreign country.

(4) For countries presented in the table, total non-sovereign exposure comprises $39.7 billion exposure to financial institutions and $42.6 billion to non-financial corporations at December 31, 2017.

(5) Consists of exposure to Germany, Ireland, Netherlands, Luxembourg and France included in Top 20.

(6) Includes non-sovereign exposure to Italy, Portugal, and Greece in the amount of $154 million, $24 million and $2 million, respectively. We had no sovereign exposure to Portugal and Greece, and the sovereign exposure to Italy was $8 million at December 31, 2017.

REAL ESTATE 1-4 FAMILY FIRST AND JUNIOR LIEN MORTGAGE LOANS Our real estate 1-4 family first and junior lien mortgage loans, as presented in Table 21, include loans we have made to customers and retained as part of our asset/liability management strategy, the Pick-a-Pay portfolio acquired from Wachovia which is discussed later in this Report and other purchased loans, and loans included on our balance sheet as a result of consolidation of variable interest entities (VIEs).

Table 21: Real Estate 1-4 Family First and Junior Lien Mortgage Loans

	December 31, 2017		December 31, 2016	
(in millions)	Balance	% of portfolio	Balance	% of portfolio
Real estate 1-4 family first mortgage	$ 284,054	88%	$ 275,579	86%
Real estate 1-4 family junior lien mortgage	39,713	12	46,237	14
Total real estate 1-4 family mortgage loans	$ 323,767	100%	$ 321,816	100%

The real estate 1-4 family mortgage loan portfolio includes some loans with adjustable-rate features and some with an interest-only feature as part of the loan terms. Interest-only loans were approximately 4% and 7% of total loans at December 31, 2017 and 2016, respectively. We believe we have manageable adjustable-rate mortgage (ARM) reset risk across our owned mortgage loan portfolios. We do not offer option ARM products, nor do we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans. The option ARMs we do have are included in the Pick-a-Pay portfolio which was acquired from Wachovia. Since our acquisition of the Pick-a-Pay loan portfolio at the end of 2008, the option payment portion of the portfolio has reduced from 86% to 36% at December 31, 2017, as a result of our modification and loss mitigation efforts. For more information, see the "Pick-a-Pay Portfolio" section in this Report.

We continue to modify real estate 1-4 family mortgage loans to assist homeowners and other borrowers experiencing financial difficulties. Loans are generally underwritten at the time of the modification in accordance with underwriting guidelines established for our loan modification programs. Under these programs, we may provide concessions such as interest rate reductions, forbearance of principal, and in some cases, principal forgiveness. These programs generally include trial payment periods of three to four months, and after successful completion and compliance with terms during this period, the loan is permanently modified. Loans included under these programs are accounted for as troubled debt restructurings (TDRs) at the start of a trial period or at the time of permanent modification, if no trial period is used. See the "Critical Accounting Policies – Allowance for Credit Losses" section in this Report for discussion on how we determine the allowance attributable to our modified residential real estate portfolios.

Part of our credit monitoring includes tracking delinquency, current FICO scores and loan/combined loan to collateral values (LTV/CLTV) on the entire real estate 1-4 family mortgage loan portfolio. These credit risk indicators, which exclude government insured/guaranteed loans, continued to improve in 2017 on the non-PCI mortgage portfolio. Loans 30 days or more delinquent at December 31, 2017, totaled $5.3 billion, or 2% of total non-PCI mortgages, compared with $5.9 billion, or 2%, at December 31, 2016. Loans with FICO scores lower than 640 totaled $11.7 billion, or 4% of total non-PCI mortgages at December 31, 2017, compared with $16.6 billion, or 5%, at December 31, 2016. Mortgages with a LTV/CLTV greater than 100% totaled $6.1 billion at December 31, 2017, or 2% of total non-PCI mortgages, compared with $8.9 billion, or 3%, at December 31, 2016. Information regarding credit quality indicators, including PCI credit quality indicators, can be found in Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Real estate 1-4 family first and junior lien mortgage loans by state are presented in Table 22. Our real estate 1-4 family non-PCI mortgage loans to borrowers in California represented 12% of total loans at December 31, 2017, located mostly within the larger metropolitan areas, with no single California metropolitan area consisting of more than 4% of total loans. We monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our real estate 1-4 family first and junior lien mortgage portfolios as part of our credit risk management process. Our underwriting and periodic review of loans and lines secured by residential real estate collateral includes appraisals or estimates from automated valuation models (AVMs) to support property values. AVMs are computer-based tools used to estimate the market value of homes. AVMs are a lower-cost alternative to appraisals and support valuations of large numbers of properties in a short period of time using market comparables and price trends for local market areas. The primary risk associated with the use of AVMs is that the value of an individual property may vary significantly from the average for the market area. We have processes to periodically validate AVMs and specific risk management guidelines addressing the circumstances when AVMs may be used. AVMs are not allowed in real estate 1-4 family first and junior lien mortgage origination underwriting. Broker evaluations and enhanced desktop appraisal reports are allowed in junior lien originations and some first lien line of credit originations up to $250,000. An appraisal is required for all real estate 1-4 family first and junior lien mortgage commitments greater than $250,000. Additional information about AVMs and our policy for their use can be found in Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Table 22: Real Estate 1-4 Family First and Junior Lien Mortgage Loans by State

	December 31, 2017			
(in millions)	Real estate 1-4 family first mortgage	Real estate 1-4 family junior lien mortgage	Total real estate 1-4 family mortgage	% of total loans
Real estate 1-4 family loans (excluding PCI):				
California	$ 101,464	10,599	112,063	12%
New York	26,624	1,937	28,561	3
New Jersey	13,212	3,606	16,818	2
Florida	13,083	3,688	16,771	2
Virginia	7,944	2,358	10,302	1
Washington	8,845	857	9,702	1
Texas	8,713	730	9,443	1
North Carolina	6,044	1,872	7,916	1
Pennsylvania	5,636	2,210	7,846	1
Other (1)	64,624	11,829	76,453	8
Government insured/ guaranteed loans (2)	15,143	—	15,143	1
Real estate 1-4 family loans (excluding PCI)	271,332	39,686	311,018	33
Real estate 1-4 family PCI loans	12,722	27	12,749	1
Total	$ 284,054	39,713	323,767	34%

(1) Consists of 41 states; no state had loans in excess of $6.8 billion.
(2) Represents loans whose repayments are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA).

First Lien Mortgage Portfolio Our total real estate 1-4 family first lien mortgage portfolio increased $8.5 billion in 2017, as non-conforming loan growth was partially offset by a decline in Pick-a-Pay loan balances. We retained $49.4 billion in non-conforming originations, consisting of loans that exceed conventional conforming loan amount limits established by federal government-sponsored entities (GSEs) in 2017.

The credit performance associated with our real estate 1-4 family first lien mortgage portfolio continued to improve in 2017, as measured through net charge-offs and nonaccrual loans. Net charge-offs as a percentage of average real estate 1-4 family first lien mortgage loans improved to a net recovery of 0.02% in 2017, compared with a net charge-off of 0.03% in 2016. Nonaccrual loans were $4.1 billion at December 31, 2017, compared with $5.0 billion at December 31, 2016. Improvement in the credit performance was driven by an improving housing environment. Real estate 1-4 family first lien mortgage loans originated after 2008, which generally utilized tighter underwriting standards, comprised approximately 79% of our total real estate 1-4 family first lien mortgage portfolio as of December 31, 2017.

Table 23 shows certain delinquency and loss information for the first lien mortgage portfolio and lists the top five states by outstanding balance.

Table 23: First Lien Mortgage Portfolio Performance

	Outstanding balance		% of loans 30 days or more past due		Loss (recovery) rate	
	December 31,		December 31,		Year ended December 31,	
(in millions)	**2017**	2016	**2017**	2016	**2017**	2016
California	**$ 101,464**	94,015	**1.06%**	1.21	**(0.07)**	(0.08)
New York	**26,624**	23,815	**1.65**	1.97	**0.03**	0.08
New Jersey	**13,212**	12,669	**2.74**	3.66	**0.16**	0.36
Florida	**13,083**	13,737	**3.95**	3.62	**(0.16)**	(0.09)
Washington	**8,845**	7,852	**0.85**	1.20	**(0.08)**	(0.13)
Other	**92,961**	91,868	**2.25**	2.59	**0.02**	0.12
Total	**256,189**	243,956	**1.78**	2.07	**(0.02)**	0.03
Government insured/guaranteed loans	**15,143**	15,605				
PCI	**12,722**	16,018				
Total first lien mortgages	**$ 284,054**	275,579				

Pick-a-Pay Portfolio The Pick-a-Pay portfolio was one of the consumer residential first lien mortgage portfolios we acquired from Wachovia and a majority of the portfolio was identified as PCI loans.

The Pick-a-Pay portfolio includes loans that offer payment options (Pick-a-Pay option payment loans), and also includes loans that were originated without the option payment feature, loans that no longer offer the option feature as a result of our modification efforts since the acquisition, and loans where the customer voluntarily converted to a fixed-rate product. The Pick-a-Pay portfolio is included in the consumer real estate 1-4 family first mortgage class of loans throughout this Report. Table 24 provides balances by types of loans as of December 31, 2017. As a result of our loan modification and loss mitigation efforts, Pick-a-Pay option payment loans have been reduced to $10.9 billion at December 31, 2017, from $99.9 billion at acquisition.

Total adjusted unpaid principal balance of Pick-a-Pay PCI loans was $16.7 billion at December 31, 2017, compared with $61.0 billion at acquisition. Due to loan modification and loss mitigation efforts, the adjusted unpaid principal balance of option payment PCI loans has declined to 14% of the total Pick-a-Pay portfolio at December 31, 2017, compared with 51% at acquisition. We expect to close on the sale of approximately $2.0 billion unpaid principal balance of Pick-a-Pay PCI loans in first quarter 2018.

Table 24: Pick-a-Pay Portfolio – Comparison to Acquisition Date

	December 31, 2017		December 31, 2008	
(in millions)	**Adjusted unpaid principal balance (1)**	**% of total**	Adjusted unpaid principal balance (1)	% of total
Option payment loans	**$ 10,891**	**36%**	$ 99,937	86%
Non-option payment adjustable-rate and fixed-rate loans	**3,771**	**13**	15,763	14
Full-term loan modifications	**15,366**	**51**	—	—
Total adjusted unpaid principal balance	**$ 30,028**	**100%**	$ 115,700	100%
Total carrying value	**$ 26,038**		$ 95,315	

(1) Adjusted unpaid principal balance includes write-downs taken on loans where severe delinquency (normally 180 days) or other indications of severe borrower financial stress exist that indicate there will be a loss of contractually due amounts upon final resolution of the loan.

Pick-a-Pay option payment loans may have fixed or adjustable rates with payment options that include a minimum payment, an interest-only payment or fully amortizing payment (both 15 and 30 year options).

Since December 31, 2008, we have completed over 138,000 proprietary and Home Affordability Modification Program (HAMP) Pick-a-Pay loan modifications, which have resulted in over $6.1 billion of principal forgiveness. We have also provided interest rate reductions and loan term extensions to enable sustainable homeownership for our Pick-a-Pay customers. As a result of these loss mitigation programs, approximately 71% of our Pick-a-Pay PCI adjusted unpaid principal balance as of December 31, 2017, has been modified.

The predominant portion of our PCI loans is included in the Pick-a-Pay portfolio. Our cash flows expected to be collected have been favorably affected over time by lower expected defaults and losses as a result of observed and forecasted economic strengthening, particularly in housing prices, and our loan modification efforts. Since acquisition, we have reclassified $8.9 billion from the nonaccretable difference to the accretable yield. Fluctuations in the accretable yield are driven by changes in interest rate indices for variable rate PCI loans, prepayment assumptions, and expected principal and interest payments over the estimated life of the portfolio, which will be affected by the pace and degree of improvements in the U.S. economy and housing markets and projected lifetime performance resulting from loan modification activity. Changes in the projected timing of cash flow events, including loan liquidations, modifications and short sales, can also affect the accretable yield and the estimated weighted-average life of the portfolio.

An increase in expected prepayments and passage of time lowered our estimated weighted-average life to approximately 6.8 years at December 31, 2017, from 7.4 years at December 31, 2016. The accretable yield percentage for Pick-a-Pay PCI loans for fourth quarter 2017 was 9.83%, up from 8.22% for fourth quarter 2016, due to the increase in the amount of accretable yield relative to the shortened weighted-average life.

For further information on the judgment involved in estimating expected cash flows for PCI loans, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Junior Lien Mortgage Portfolio The junior lien mortgage portfolio consists of residential mortgage lines and loans that are subordinate in rights to an existing lien on the same property. It is not unusual for these lines and loans to have draw periods, interest only payments, balloon payments, adjustable rates and similar features. Junior lien loan products are mostly amortizing payment loans with fixed interest rates and repayment periods between five to 30 years.

We continuously monitor the credit performance of our junior lien mortgage portfolio for trends and factors that influence the frequency and severity of loss. We have observed that the severity of loss for junior lien mortgages is high and generally not affected by whether we or a third party own or service the related first lien mortgage, but the frequency of delinquency is typically lower when we own or service the first lien mortgage. In general, we have limited information available on the delinquency status of the third party owned or serviced senior lien where we also hold a junior lien. To capture this inherent loss content, our allowance process for junior lien mortgages considers the relative difference in loss experience for junior lien mortgages behind first lien mortgage loans we own or service, compared with those behind first lien mortgage loans owned or serviced by third parties. In addition, our allowance process for junior lien mortgages that are current, but are in their revolving period, considers the inherent loss where the borrower is delinquent on the corresponding first lien mortgage loans.

Table 25 shows certain delinquency and loss information for the junior lien mortgage portfolio and lists the top five states by outstanding balance. The decrease in outstanding balances since December 31, 2016, predominantly reflects loan paydowns. As of December 31, 2017, 9% of the outstanding balance of the junior lien mortgage portfolio was associated with loans that had a combined loan to value (CLTV) ratio in excess of 100%. Of those junior lien mortgages with a CLTV ratio in excess of 100%, 3.29% were 30 days or more past due. CLTV means the ratio of the total loan balance of first lien mortgages and junior lien mortgages (including unused line amounts for credit line products) to property collateral value. The unsecured portion (the outstanding amount that was in excess of the most recent property collateral value) of the outstanding balances of these loans totaled 3% of the junior lien mortgage portfolio at December 31, 2017. For additional information on consumer loans by LTV/CLTV, see Table 6.12 in Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Table 25: Junior Lien Mortgage Portfolio Performance

	Outstanding balance		% of loans 30 days or more past due		Loss rate	
	December 31,		December 31,		Year ended December 31,	
(in millions)	**2017**	2016	**2017**	2016	**2017**	2016
California	$ **10,599**	12,539	**2.09%**	1.86	**(0.40)**	0.01
Florida	**3,688**	4,252	**3.05**	2.17	**0.10**	0.65
New Jersey	**3,606**	4,031	**2.86**	2.79	**0.64**	1.06
Virginia	**2,358**	2,696	**2.34**	1.97	**0.29**	0.72
Pennsylvania	**2,210**	2,494	**2.37**	2.07	**0.39**	0.72
Other	**17,225**	20,189	**2.33**	2.09	**0.08**	0.52
Total	**39,686**	46,201	**2.38**	2.09	**0.03**	0.46
PCI	**27**	36				
Total junior lien mortgages	$ **39,713**	46,237				

Our junior lien, as well as first lien, lines of credit portfolios generally have draw periods of 10, 15 or 20 years with variable interest rate and payment options during the draw period of (1) interest only or (2) 1.5% of outstanding principal balance plus accrued interest. During the draw period, the borrower has the option of converting all or a portion of the line from a variable interest rate to a fixed rate with terms including interest-only payments for a fixed period between three to seven years or a fully amortizing payment with a fixed period between five to 30 years. At the end of the draw period, a line of credit generally converts to an amortizing payment schedule with repayment terms of up to 30 years based on the balance at time of conversion. Certain lines and loans have been structured with a balloon payment, which requires full repayment of the outstanding balance at the end of the term period. The conversion of lines or loans to fully amortizing or balloon payoff may result in a significant payment increase, which can affect some borrowers' ability to repay the outstanding balance.

On a monthly basis, we monitor the payment characteristics of borrowers in our junior lien portfolio. In December 2017, approximately 48% of these borrowers paid only the minimum amount due and approximately 46% paid more than the minimum amount due. The rest were either delinquent or paid less than the minimum amount due. For the borrowers with an interest only payment feature, approximately 31% paid only the minimum amount due and approximately 64% paid more than the minimum amount due.

The lines that enter their amortization period may experience higher delinquencies and higher loss rates than the ones in their draw or term period. We have considered this increased inherent risk in our allowance for credit loss estimate.

In anticipation of our borrowers reaching the end of their contractual commitment, we have created a program to inform, educate and help these borrowers transition from interest-only to fully-amortizing payments or full repayment. We monitor the performance of the borrowers moving through the program in an effort to refine our ongoing program strategy.

Table 26 reflects the outstanding balance of our portfolio of junior lien mortgages, including lines and loans, and senior lien lines segregated into scheduled end of draw or end of term periods and products that are currently amortizing, or in balloon repayment status. It excludes real estate 1-4 family first lien line reverse mortgages, which total $132 million, because they are predominantly insured by the FHA, and it excludes PCI loans, which total $49 million, because their losses were generally reflected in our nonaccretable difference established at the date of acquisition.

Table 26: Junior Lien Mortgage Line and Loan and Senior Lien Mortgage Line Portfolios Payment Schedule

			Scheduled end of draw/term					
(in millions)	Outstanding balance December 31, 2017	2018	2019	2020	2021	2022	2023 and thereafter (1)	Amortizing
Junior lien lines and loans	$ **39,686**	1,550	705	670	1,353	4,663	17,642	13,103
First lien lines	**13,485**	516	258	257	600	2,190	7,600	2,064
Total (2)(3)	$ **53,171**	2,066	963	927	1,953	6,853	25,242	15,167
% of portfolios	**100%**	**4**	**2**	**2**	**4**	**13**	**47**	**28**

(1) Substantially all lines and loans are scheduled to convert to amortizing loans by the end of 2026, with annual scheduled amounts through that date ranging from $4.1 billion to $7.0 billion and averaging $5.6 billion per year.
(2) Junior and first lien lines are primarily interest-only during their draw period. The unfunded credit commitments for junior and first lien lines totaled $62.3 billion at December 31, 2017.
(3) Includes scheduled end-of-term balloon payments for lines and loans totaling $223 million, $260 million, $288 million, $458 million, $215 million and $44 million for 2018, 2019, 2020, 2021, 2022, and 2023 and thereafter, respectively. Amortizing lines and loans include $110 million of end-of-term balloon payments, which are past due. At December 31, 2017, $575 million, or 5% of outstanding lines of credit that are amortizing, are 30 days or more past due compared to $690 million or 2% for lines in their draw period.

CREDIT CARDS Our credit card portfolio totaled $38.0 billion at December 31, 2017, which represented 4% of our total outstanding loans. The net charge-off rate for our credit card portfolio was 3.49% for 2017, compared with 3.08% for 2016, principally from seasoning of newer vintages.

AUTOMOBILE Our automobile portfolio, predominantly composed of indirect loans, totaled $53.4 billion at December 31, 2017. The net charge-off rate for our automobile portfolio was 1.18% for 2017, compared with 0.84% for 2016. The increase in net charge-offs in 2017, compared with 2016, was due to increased loss severities resulting from a temporary moratorium on certain repossessions for customers who have had CPI policies purchased on their behalf while we remediate the previously disclosed CPI issues, as well as updated industry regulatory guidance regarding the timing of loss recognition for automobile loans in bankruptcy, and also reflected the current trend of increased charge-offs in the automobile lending industry.

We have entered into an agreement to sell certain assets and liabilities of Reliable Financial Services Inc. and Reliable Finance Holding Company, which are subsidiaries of Wells Fargo's auto financing business in Puerto Rico. The sale, consisting of approximately $1.5 billion in consumer auto loans and $340 million in commercial loans, is expected to close in second quarter 2018.

OTHER REVOLVING CREDIT AND INSTALLMENT Other revolving credit and installment loans totaled $38.3 billion at December 31, 2017, and primarily included student and security-based loans. Our private student loan portfolio totaled $11.9 billion at December 31, 2017. All remaining student loans guaranteed by agencies on behalf of the U.S. Department of Education under the Federal Family Education Loan Program (FFELP) were sold as of March 31, 2017. The net charge-off rate for other revolving credit and installment loans was 1.52% for 2017, compared with 1.46% for 2016.

NONPERFORMING ASSETS (NONACCRUAL LOANS AND FORECLOSED ASSETS) Table 27 summarizes nonperforming assets (NPAs) for each of the last five years. We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower's financial condition and the adequacy of collateral, if any);
- they are 90 days (120 days with respect to real estate 1-4 family first and junior lien mortgages) past due for interest or principal, unless both well-secured and in the process of collection;
- part of the principal balance has been charged off;
- for junior lien mortgages, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status; or
- consumer real estate and automobile loans receive notification of bankruptcy, regardless of their delinquency status.

Credit card loans are not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due.

Note 1 (Summary of Significant Accounting Policies – Loans) to Financial Statements in this Report describes our accounting policy for nonaccrual and impaired loans.

Nonaccrual loans were $8.0 billion at December 31, 2017, down $2.4 billion from $10.4 billion at December 31, 2016, due to a $1.3 billion decrease in commercial and industrial nonaccruals reflecting continued improvement in the oil and gas portfolio, as well as a decrease of $1.0 billion in consumer real estate nonaccruals.

Table 27: Nonperforming Assets (Nonaccrual Loans and Foreclosed Assets)

					December 31,
(in millions)	**2017**	2016	2015	2014	2013
Nonaccrual loans:					
Commercial:					
Commercial and industrial	**$ 1,899**	3,216	1,363	538	775
Real estate mortgage	**628**	685	969	1,490	2,254
Real estate construction	**37**	43	66	187	416
Lease financing	**76**	115	26	24	30
Total commercial	**2,640**	4,059	2,424	2,239	3,475
Consumer:					
Real estate 1-4 family first mortgage (1)	**4,122**	4,962	7,293	8,583	9,799
Real estate 1-4 family junior lien mortgage	**1,086**	1,206	1,495	1,848	2,188
Automobile	**130**	106	121	137	173
Other revolving credit and installment	**58**	51	49	41	33
Total consumer	**5,396**	6,325	8,958	10,609	12,193
Total nonaccrual loans (2)(3)(4)	**8,036**	10,384	11,382	12,848	15,668
As a percentage of total loans	**0.84%**	1.07	1.24	1.49	1.91
Foreclosed assets:					
Government insured/guaranteed (5)	**$ 120**	197	446	982	2,093
Non-government insured/guaranteed	**522**	781	979	1,627	1,844
Total foreclosed assets	**642**	978	1,425	2,609	3,937
Total nonperforming assets	**$ 8,678**	11,362	12,807	15,457	19,605
As a percentage of total loans	**0.91%**	1.17	1.40	1.79	2.38

(1) Includes MHFS of $136 million, $149 million, $177 million, $177 million and $227 million at December 31, 2017, 2016, 2015, 2014, and 2013, respectively.
(2) Excludes PCI loans because they continue to earn interest income from accretable yield, independent of performance in accordance with their contractual terms.
(3) Real estate 1-4 family mortgage loans predominantly insured by the FHA or guaranteed by the VA and student loans largely guaranteed by agencies on behalf of the U.S. Department of Education under the FFELP are not placed on nonaccrual status because they are insured or guaranteed. All remaining student loans guaranteed under the FFELP were sold as of March 31, 2017.
(4) See Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report for further information on impaired loans.
(5) During fourth quarter 2014, we adopted Accounting Standards Update (ASU) 2014-14, *Classification of Certain Government-Guaranteed Mortgage Loans Upon Foreclosure*, effective as of January 1, 2014. This ASU requires that certain government guaranteed residential real estate mortgage loans that meet specific criteria be recognized as other receivables upon foreclosure; previously, these assets were included in foreclosed assets. Government guaranteed residential real estate mortgage loans that completed foreclosure during 2014 and met the criteria specified by ASU 2014-14 are excluded from this table and included in Accounts Receivable in Other Assets. For more information on the classification of certain government-guaranteed mortgage loans upon foreclosure, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Table 28 provides a summary of nonperforming assets during 2017.

Table 28: Nonperforming Assets by Quarter During 2017

	December 31, 2017		September 30, 2017		June 30, 2017		March 31, 2017	
(in millions)	**Balance**	**% of total loans**	Balance	% of total loans	Balance	% of total loans	Balance	% of total loans
Nonaccrual loans:								
Commercial:								
Commercial and industrial	**$ 1,899**	**0.57%**	$ 2,397	0.73%	$ 2,632	0.79%	$ 2,898	0.88%
Real estate mortgage	**628**	**0.50**	593	0.46	630	0.48	672	0.51
Real estate construction	**37**	**0.15**	38	0.15	34	0.13	40	0.16
Lease financing	**76**	**0.39**	81	0.42	89	0.46	96	0.50
Total commercial	**2,640**	**0.52**	3,109	0.62	3,385	0.67	3,706	0.73
Consumer:								
Real estate 1-4 family first mortgage	**4,122**	**1.45**	4,213	1.50	4,413	1.60	4,743	1.73
Real estate 1-4 family junior lien mortgage	**1,086**	**2.73**	1,101	2.68	1,095	2.56	1,153	2.60
Automobile	**130**	**0.24**	137	0.25	104	0.18	101	0.17
Other revolving credit and installment	**58**	**0.15**	59	0.15	59	0.15	56	0.14
Total consumer (1)	**5,396**	**1.19**	5,510	1.22	5,671	1.26	6,053	1.34
Total nonaccrual loans	**8,036**	**0.84**	8,619	0.91	9,056	0.95	9,759	1.02
Foreclosed assets:								
Government insured/guaranteed	**120**		137		149		179	
Non-government insured/guaranteed	**522**		569		632		726	
Total foreclosed assets	**642**		706		781		905	
Total nonperforming assets	**$ 8,678**	**0.91%**	$ 9,325	0.98%	$ 9,837	1.03%	$ 10,664	1.11%
Change in NPAs from prior quarter	**$ (647)**		(512)		(827)		(698)	

(1) Includes an incremental $171 million of nonaccrual loans at September 30, 2017, reflecting updated industry regulatory guidance related to loans in bankruptcy.

Table 29 provides an analysis of the changes in nonaccrual loans.

Table 29: Analysis of Changes in Nonaccrual Loans

	Quarter ended				Year ended Dec 31,	
(in millions)	**Dec 31, 2017**	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017	**2017**	2016
Commercial nonaccrual loans						
Balance, beginning of period	$ **3,109**	3,385	3,706	4,059	**4,059**	2,424
Inflows	**617**	627	704	945	**2,893**	6,358
Outflows:						
Returned to accruing	**(126)**	(97)	(61)	(133)	**(417)**	(205)
Foreclosures	**(1)**	(3)	(15)	(1)	**(20)**	(26)
Charge-offs	**(139)**	(173)	(116)	(202)	**(630)**	(1,319)
Payments, sales and other	**(820)**	(630)	(833)	(962)	**(3,245)**	(3,173)
Total outflows	**(1,086)**	(903)	(1,025)	(1,298)	**(4,312)**	(4,723)
Balance, end of period	**2,640**	3,109	3,385	3,706	**2,640**	4,059
Consumer nonaccrual loans						
Balance, beginning of period	**5,510**	5,671	6,053	6,325	**6,325**	8,958
Inflows (1)	**845**	887	676	814	**3,222**	3,524
Outflows:						
Returned to accruing	**(345)**	(397)	(425)	(428)	**(1,595)**	(2,137)
Foreclosures	**(72)**	(56)	(72)	(81)	**(281)**	(327)
Charge-offs	**(94)**	(109)	(117)	(151)	**(471)**	(720)
Payments, sales and other	**(448)**	(486)	(444)	(426)	**(1,804)**	(2,973)
Total outflows	**(959)**	(1,048)	(1,058)	(1,086)	**(4,151)**	(6,157)
Balance, end of period	**5,396**	5,510	5,671	6,053	**5,396**	6,325
Total nonaccrual loans	$ **8,036**	8,619	9,056	9,759	**8,036**	10,384

(1) Quarter ended September 30, 2017, includes an incremental $171 million of nonaccrual loans, reflecting updated industry regulatory guidance related to loans in bankruptcy.

Typically, changes to nonaccrual loans period-over-period represent inflows for loans that are placed on nonaccrual status in accordance with our policy, offset by reductions for loans that are paid down, charged off, sold, foreclosed, or are no longer classified as nonaccrual as a result of continued performance and an improvement in the borrower's financial condition and loan repayment capabilities. Also, reductions can come from borrower repayments even if the loan remains on nonaccrual.

While nonaccrual loans are not free of loss content, we believe exposure to loss is significantly mitigated by the following factors at December 31, 2017:

- 99% of total commercial nonaccrual loans and 99% of total consumer nonaccrual loans are secured. Of the consumer nonaccrual loans, 97% are secured by real estate and 82% have a combined LTV (CLTV) ratio of 80% or less.
- losses of $402 million and $1.8 billion have already been recognized on 18% of commercial nonaccrual loans and 43% of consumer nonaccrual loans, respectively. Generally, when a consumer real estate loan is 120 days past due (except when required earlier by guidance issued by bank regulatory agencies), we transfer it to nonaccrual status. When the loan reaches 180 days past due, or is active or discharged in bankruptcy, it is our policy to write these loans down to net realizable value (fair value of collateral less estimated costs to sell). Thereafter, we re-evaluate each loan regularly and record additional write-downs if needed.
- 85% of commercial nonaccrual loans were current on interest, but were on nonaccrual status because the full or timely collection of interest or principal had become uncertain.
- 79% of commercial nonaccrual loans were current on both principal and interest, but will remain on nonaccrual status until the full and timely collection of principal and interest becomes certain.
- the remaining risk of loss of all nonaccrual loans has been considered and we believe is adequately covered by the allowance for loan losses.
- of $2.3 billion of consumer loans in bankruptcy or discharged in bankruptcy, and classified as nonaccrual, $1.5 billion were current.

We continue to work with our customers experiencing financial difficulty to determine if they can qualify for a loan modification so that they can stay in their homes. Under both our proprietary modification programs and the Making Home Affordable (MHA) programs, customers may be required to provide updated documentation, and some programs require completion of payment during trial periods to demonstrate sustained performance before the loan can be removed from nonaccrual status.

If interest due on all nonaccrual loans (including loans that were, but are no longer on nonaccrual at year end) had been accrued under the original terms, approximately $525 million of interest would have been recorded as income on these loans, compared with $404 million actually recorded as interest income in 2017, versus $658 million and $481 million, respectively, in 2016.

Table 30 provides a summary of foreclosed assets and an analysis of changes in foreclosed assets.

Table 30: Foreclosed Assets

		Quarter ended				
		Dec 31,	Sep 30,	Jun 30,	Mar 31,	Year ended Dec 31,	
(in millions)		**2017**	2017	2017	2017	**2017**	2016
Summary by loan segment							
Government insured/guaranteed	$	**120**	137	149	179	**120**	197
PCI loans:							
Commercial		**57**	67	79	84	**57**	91
Consumer		**62**	72	67	80	**62**	75
Total PCI loans		**119**	139	146	164	**119**	166
All other loans:							
Commercial		**207**	226	259	275	**207**	287
Consumer		**196**	204	227	287	**196**	328
Total all other loans		**403**	430	486	562	**403**	615
Total foreclosed assets	$	**642**	706	781	905	**642**	978
Analysis of changes in foreclosed assets (1)							
Balance, beginning of period	$	**706**	781	905	978	**978**	1,425
Net change in government insured/guaranteed (2)		**(17)**	(12)	(30)	(18)	**(77)**	(249)
Additions to foreclosed assets (3)		**180**	198	233	288	**899**	1,237
Reductions:							
Sales		**(231)**	(257)	(330)	(307)	**(1,125)**	(1,512)
Write-downs and gains (losses) on sales		**4**	(4)	3	(36)	**(33)**	77
Total reductions		**(227)**	(261)	(327)	(343)	**(1,158)**	(1,435)
Balance, end of period	$	**642**	706	781	905	**642**	978

(1) During fourth quarter 2016, we evaluated a population of foreclosed properties that were previously security for FHA insured loans, and made the decision to retain some of the properties as foreclosed real estate, thereby foregoing the FHA insurance claim. Accordingly, the loans for which we decided not to file a claim are reported as additions to foreclosed assets rather than included as net change in government insured/guaranteed foreclosures.
(2) Foreclosed government insured/guaranteed loans are temporarily transferred to and held by us as servicer, until reimbursement is received from FHA or VA. The net change in government insured/guaranteed foreclosed assets is generally made up of inflows from mortgages held for investment and MHFS, and outflows when we are reimbursed by FHA/VA.
(3) Includes loans moved into foreclosure from nonaccrual status, PCI loans transitioned directly to foreclosed assets and repossessed automobiles.

Foreclosed assets at December 31, 2017, included $372 million of foreclosed residential real estate, of which 32% is predominantly FHA insured or VA guaranteed and expected to have minimal or no loss content. The remaining foreclosed assets balance of $270 million has been written down to estimated net realizable value. Of the $642 million in foreclosed assets at December 31, 2017, 55% have been in the foreclosed assets portfolio one year or less.

TROUBLED DEBT RESTRUCTURINGS (TDRs)

Table 31: Troubled Debt Restructurings (TDRs)

					December 31,
(in millions)	**2017**	2016	2015	2014	2013
Commercial TDRs					
Commercial and industrial	**$ 2,096**	2,584	1,123	724	1,034
Real estate mortgage	**901**	1,119	1,456	1,880	2,248
Real estate construction	**44**	91	125	314	475
Lease financing	**35**	6	1	2	8
Total commercial TDRs	**3,076**	3,800	2,705	2,920	3,765
Consumer TDRs					
Real estate 1-4 family first mortgage	**12,080**	14,134	16,812	18,226	18,925
Real estate 1-4 family junior lien mortgage	**1,849**	2,074	2,306	2,437	2,468
Credit Card	**356**	300	299	338	431
Automobile	**87**	85	105	127	189
Other revolving credit and installment	**126**	101	73	49	33
Trial modifications	**194**	299	402	452	650
Total consumer TDRs (1)	**14,692**	16,993	19,997	21,629	22,696
Total TDRs	**$ 17,768**	20,793	22,702	24,549	26,461
TDRs on nonaccrual status	**$ 4,801**	6,193	6,506	7,104	8,172
TDRs on accrual status (1)	**12,967**	14,600	16,196	17,445	18,289
Total TDRs	**$ 17,768**	20,793	22,702	24,549	26,461

(1) TDR loans include $1.4 billion, $1.5 billion $1.8 billion, $2.1 billion, and $2.5 billion at December 31, 2017, 2016, 2015, 2014, and 2013, respectively, of government insured/guaranteed loans that are predominantly insured by the FHA or guaranteed by the VA and are accruing.

Table 32: TDRs Balance by Quarter During 2017

(in millions)	**Dec 31, 2017**	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017
Commercial TDRs				
Commercial and industrial	**$ 2,096**	2,424	2,629	2,484
Real estate mortgage	**901**	953	1,024	1,090
Real estate construction	**44**	48	62	73
Lease financing	**35**	39	21	8
Total commercial TDRs	**3,076**	3,464	3,736	3,655
Consumer TDRs				
Real estate 1-4 family first mortgage	**12,080**	12,617	13,141	13,680
Real estate 1-4 family junior lien mortgage	**1,849**	1,919	1,975	2,027
Credit Card	**356**	340	316	308
Automobile	**87**	88	85	80
Other revolving credit and installment	**126**	124	118	107
Trial modifications	**194**	183	215	261
Total consumer TDRs	**14,692**	15,271	15,850	16,463
Total TDRs	**$ 17,768**	18,735	19,586	20,118
TDRs on nonaccrual status	**$ 4,801**	5,218	5,637	5,819
TDRs on accrual status	**12,967**	13,517	13,949	14,299
Total TDRs	**$ 17,768**	18,735	19,586	20,118

Table 31 and Table 32 provide information regarding the recorded investment of loans modified in TDRs. The allowance for loan losses for TDRs was $1.6 billion and $2.2 billion at December 31, 2017 and 2016, respectively. See Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report for additional information regarding TDRs. In those situations where principal is forgiven, the entire amount of such forgiveness is immediately charged off to the extent not done so prior to the modification. When we delay the timing on the repayment of a portion of principal (principal forbearance), we charge off the amount of forbearance if that amount is not considered fully collectible.

Our nonaccrual policies are generally the same for all loan types when a restructuring is involved. We typically re-underwrite loans at the time of restructuring to determine whether there is sufficient evidence of sustained repayment capacity based on the borrower's documented income, debt to income ratios, and other factors. Loans lacking sufficient evidence of sustained repayment capacity at the time of modification are charged down to the fair value of the collateral, if applicable. For an accruing loan that has been modified, if the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. Otherwise, the loan will be placed in nonaccrual status and may be returned to accruing status when the borrower demonstrates a sustained period of performance, generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to modification. Loans will also be placed on nonaccrual, and a corresponding charge-off is recorded to the loan balance, when we believe that principal and interest contractually due under the modified agreement will not be collectible.

Table 33 provides an analysis of the changes in TDRs. Loans modified more than once are reported as TDR inflows only in the period they are first modified. Other than resolutions such as foreclosures, sales and transfers to held for sale, we may remove loans held for investment from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

Table 33: Analysis of Changes in TDRs

	Quarter ended				Year ended Dec 31,	
(in millions)	**Dec 31, 2017**	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017	**2017**	2016
Commercial TDRs						
Balance, beginning of period	**$ 3,464**	3,736	3,655	3,800	**3,800**	2,705
Inflows (1)	**412**	333	730	642	**2,117**	3,192
Outflows						
Charge-offs	**(65)**	(74)	(59)	(108)	**(306)**	(473)
Foreclosure	**(1)**	(2)	(12)	—	**(15)**	(16)
Payments, sales and other (2)	**(734)**	(529)	(578)	(679)	**(2,520)**	(1,608)
Balance, end of period	**3,076**	3,464	3,736	3,655	**3,076**	3,800
Consumer TDRs						
Balance, beginning of period	**15,271**	15,850	16,463	16,993	**16,993**	19,997
Inflows (1)	**395**	461	444	517	**1,817**	2,224
Outflows						
Charge-offs	**(52)**	(51)	(51)	(51)	**(205)**	(218)
Foreclosure	**(135)**	(146)	(159)	(179)	**(619)**	(851)
Payments, sales and other (2)	**(798)**	(811)	(801)	(779)	**(3,189)**	(4,056)
Net change in trial modifications (3)	**11**	(32)	(46)	(38)	**(105)**	(103)
Balance, end of period	**14,692**	15,271	15,850	16,463	**14,692**	16,993
Total TDRs	**$ 17,768**	18,735	19,586	20,118	**17,768**	20,793

(1) Inflows include loans that modify, even if they resolve, within the period as well as advances on loans that modified in a prior period.
(2) Other outflows include normal amortization/accretion of loan basis adjustments and loans transferred to held-for-sale. It also includes $6 million of loans refinanced or restructured at market terms and qualifying as new loans and removed from TDR classification for the quarter ended September 30, 2017, while no loans were removed from TDR classification for the quarters ended December 31, June 30 and March 31, 2017. During 2016, $4 million of loans refinanced or structured as new loans and were removed from TDR classification.
(3) Net change in trial modifications includes: inflows of new TDRs entering the trial payment period, net of outflows for modifications that either (i) successfully perform and enter into a permanent modification, or (ii) did not successfully perform according to the terms of the trial period plan and are subsequently charged-off, foreclosed upon or otherwise resolved.

LOANS 90 DAYS OR MORE PAST DUE AND STILL ACCRUING Loans 90 days or more past due as to interest or principal are still accruing if they are (1) well-secured and in the process of collection or (2) real estate 1-4 family mortgage loans or consumer loans exempt under regulatory rules from being classified as nonaccrual until later delinquency, usually 120 days past due. PCI loans are not included in past due and still accruing loans even when they are 90 days or more contractually past due. These PCI loans are considered to be accruing because they continue to earn interest from accretable yield, independent of performance in accordance with their contractual terms.

Excluding insured/guaranteed loans, loans 90 days or more past due and still accruing at December 31, 2017, were up $91 million, or 9%, from December 31, 2016, due to increases related to loan growth in real estate 1-4 family first mortgages and credit cards, as well as higher delinquencies in automobile loans resulting from the impact of the temporary moratorium on repossession activity for loans with CPI policies, which allowed aging of those loans to continue up to 120 days, and overall increases in delinquencies in the automobile lending industry. These increases were partially offset by declines in commercial real estate mortgages and other revolving credit and installment loans.

Loans 90 days or more past due and still accruing whose repayments are predominantly insured by the FHA or guaranteed by the VA for mortgages were $10.9 billion at both December 31, 2017 and 2016. All remaining student loans guaranteed by agencies on behalf of the U.S. Department of Education under the FFELP were sold as of March 31, 2017.

Table 34 reflects non-PCI loans 90 days or more past due and still accruing by class for loans not government insured/ guaranteed. For additional information on delinquencies by loan class, see Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Table 34: Loans 90 Days or More Past Due and Still Accruing

	December 31,				
(in millions)	**2017**	2016	2015	2014	2013
Total (excluding PCI)(1):	**$ 11,997**	11,858	14,380	17,810	23,219
Less: FHA insured/guaranteed by the VA (2)(3)	**10,934**	10,883	13,373	16,827	21,274
Less: Student loans guaranteed under the FFELP (4)	**—**	3	26	63	900
Total, not government insured/guaranteed	**$ 1,063**	972	981	920	1,045
By segment and class, not government insured/guaranteed:					
Commercial:					
Commercial and industrial	**$ 26**	28	97	31	11
Real estate mortgage	**23**	36	13	16	35
Real estate construction	**—**	—	4	—	97
Total commercial	**49**	64	114	47	143
Consumer:					
Real estate 1-4 family first mortgage (3)	**219**	175	224	260	354
Real estate 1-4 family junior lien mortgage (3)	**60**	56	65	83	86
Credit card	**492**	452	397	364	321
Automobile	**143**	112	79	73	55
Other revolving credit and installment	**100**	113	102	93	86
Total consumer	**1,014**	908	867	873	902
Total, not government insured/guaranteed	**$ 1,063**	972	981	920	1,045

(1) PCI loans totaled $1.4 billion, $2.0 billion, $2.9 billion, $3.7 billion and $4.5 billion at December 31, 2017, 2016, 2015, 2014 and 2013, respectively.
(2) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.
(3) Includes mortgages held for sale 90 days or more past due and still accruing.
(4) Represents loans whose repayments are largely guaranteed by agencies on behalf of the U.S. Department of Education under the FFELP. All remaining student loans guaranteed under the FFELP were sold as of March 31, 2017.

NET CHARGE-OFFS

Table 35: Net Charge-offs

	Year ended		Quarter ended							
	December 31,		December 31,		September 30,		June 30,		March 31,	
($ in millions)	Net loan charge-offs	% of avg. loans	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)
2017										
Commercial:										
Commercial and industrial	**$ 492**	**0.15%**	**$ 118**	**0.14%**	**$ 125**	**0.15%**	**$ 78**	**0.10%**	**$ 171**	**0.21%**
Real estate mortgage	**(44)**	**(0.03)**	**(10)**	**(0.03)**	**(3)**	**(0.01)**	**(6)**	**(0.02)**	**(25)**	**(0.08)**
Real estate construction	**(30)**	**(0.12)**	**(3)**	**(0.05)**	**(15)**	**(0.24)**	**(4)**	**(0.05)**	**(8)**	**(0.15)**
Lease financing	**28**	**0.15**	**10**	**0.20**	**6**	**0.12**	**7**	**0.15**	**5**	**0.11**
Total commercial	**446**	**0.09**	**115**	**0.09**	**113**	**0.09**	**75**	**0.06**	**143**	**0.11**
Consumer:										
Real estate 1-4 family first mortgage	**(48)**	**(0.02)**	**(23)**	**(0.03)**	**(16)**	**(0.02)**	**(16)**	**(0.02)**	**7**	**0.01**
Real estate 1-4 family junior lien mortgage	**13**	**0.03**	**(7)**	**(0.06)**	**1**	**—**	**(4)**	**(0.03)**	**23**	**0.21**
Credit card	**1,242**	**3.49**	**336**	**3.66**	**277**	**3.08**	**320**	**3.67**	**309**	**3.54**
Automobile	**683**	**1.18**	**188**	**1.38**	**202**	**1.41**	**126**	**0.86**	**167**	**1.10**
Other revolving credit and installment	**592**	**1.52**	**142**	**1.46**	**140**	**1.44**	**154**	**1.58**	**156**	**1.60**
Total consumer	**2,482**	**0.55**	**636**	**0.56**	**604**	**0.53**	**580**	**0.51**	**662**	**0.59**
Total	**$ 2,928**	**0.31%**	**$ 751**	**0.31%**	**$ 717**	**0.30%**	**$ 655**	**0.27%**	**$ 805**	**0.34%**
2016										
Commercial:										
Commercial and industrial	$ 1,156	0.36 %	$ 256	0.31 %	$ 259	0.32 %	$ 368	0.46 %	$ 273	0.36 %
Real estate mortgage	(89)	(0.07)	(12)	(0.04)	(28)	(0.09)	(20)	(0.06)	(29)	(0.10)
Real estate construction	(37)	(0.16)	(8)	(0.13)	(18)	(0.32)	(3)	(0.06)	(8)	(0.13)
Lease financing	30	0.17	15	0.32	2	0.04	12	0.27	1	0.01
Total commercial	1,060	0.22	251	0.20	215	0.17	357	0.29	237	0.20
Consumer:										
Real estate 1-4 family first mortgage	79	0.03	(3)	—	20	0.03	14	0.02	48	0.07
Real estate 1-4 family junior lien mortgage	229	0.46	44	0.38	49	0.40	62	0.49	74	0.57
Credit card	1,052	3.08	275	3.09	245	2.82	270	3.25	262	3.16
Automobile	520	0.84	166	1.05	137	0.87	90	0.59	127	0.85
Other revolving credit and installment	580	1.46	172	1.70	139	1.40	131	1.32	138	1.42
Total consumer	2,460	0.53	654	0.56	590	0.51	567	0.49	649	0.57
Total	$ 3,520	0.37 %	$ 905	0.37 %	$ 805	0.33 %	$ 924	0.39 %	$ 886	0.38 %

(1) Quarterly net charge-offs (recoveries) as a percentage of average respective loans are annualized.

Table 35 presents net charge-offs for the four quarters and full year of 2017 and 2016. Net charge-offs in 2017 were $2.9 billion (0.31% of average total loans outstanding) compared with $3.5 billion (0.37%) in 2016.

The decrease in commercial and industrial net charge-offs in 2017 reflected continued improvement in our oil and gas portfolio. Our commercial real estate portfolios were in a net recovery position every quarter in 2017 and 2016. Total consumer net charge-offs increased slightly from the prior year due to an increase in credit card and automobile net charge-offs, partially offset by a decrease in residential real estate net charge-offs.

ALLOWANCE FOR CREDIT LOSSES The allowance for credit losses, which consists of the allowance for loan losses and the allowance for unfunded credit commitments, is management's estimate of credit losses inherent in the loan portfolio and unfunded credit commitments at the balance sheet date, excluding loans carried at fair value. The detail of the changes in the allowance for credit losses by portfolio segment (including charge-offs and recoveries by loan class) is in Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

We apply a disciplined process and methodology to establish our allowance for credit losses each quarter. This process takes into consideration many factors, including historical and forecasted loss trends, loan-level credit quality ratings and loan grade-specific characteristics. The process involves subjective and complex judgments. In addition, we review a variety of credit metrics and trends. These credit metrics and trends, however, do not solely determine the amount of the allowance as we use several analytical tools. Our estimation approach for the commercial portfolio reflects the estimated probability of default in accordance with the borrower's financial strength, and the severity of loss in the event of default, considering the quality of any underlying collateral. Probability of default and severity at the time of default are statistically derived through historical observations of defaults and losses after default within each credit risk rating. Our estimation approach for the consumer portfolio uses forecasted losses that represent our best estimate of inherent loss based on historical experience, quantitative and other mathematical techniques. For additional information on our allowance for credit losses, see the "Critical Accounting Policies – Allowance for Credit Losses" section and Note 1 (Summary of Significant Accounting Policies) and Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

Table 36 presents the allocation of the allowance for credit losses by loan segment and class for the last five years.

Table 36: Allocation of the Allowance for Credit Losses (ACL)

	Dec 31, 2017		Dec 31, 2016		Dec 31, 2015		Dec 31, 2014		Dec 31, 2013	
(in millions)	**ACL**	**Loans as % of total loans**	ACL	Loans as % of total loans	ACL	Loans as % of total loans	ACL	Loans as % of total loans	ACL	Loans as % of total loans
Commercial:										
Commercial and industrial	**$ 3,752**	**35%**	$ 4,560	34%	$ 4,231	33%	$ 3,506	32%	$ 3,040	29%
Real estate mortgage	**1,374**	**13**	1,320	14	1,264	13	1,576	13	2,157	14
Real estate construction	**1,238**	**3**	1,294	2	1,210	3	1,097	2	775	2
Lease financing	**268**	**2**	220	2	167	1	198	1	131	1
Total commercial	**6,632**	**53**	7,394	52	6,872	50	6,377	48	6,103	46
Consumer:										
Real estate 1-4 family first mortgage	**1,085**	**30**	1,270	29	1,895	30	2,878	31	4,087	32
Real estate 1-4 family junior lien mortgage	**608**	**4**	815	5	1,223	6	1,566	7	2,534	8
Credit card	**1,944**	**4**	1,605	4	1,412	4	1,271	4	1,224	3
Automobile	**1,039**	**5**	817	6	529	6	516	6	475	6
Other revolving credit and installment	**652**	**4**	639	4	581	4	561	4	548	5
Total consumer	**5,328**	**47**	5,146	48	5,640	50	6,792	52	8,868	54
Total	**$ 11,960**	**100%**	$ 12,540	100%	$ 12,512	100%	$ 13,169	100%	$ 14,971	100%

	Dec 31, 2017	Dec 31, 2016	Dec 31, 2015	Dec 31, 2014	Dec 31, 2013
Components:					
Allowance for loan losses	**$ 11,004**	11,419	11,545	12,319	14,502
Allowance for unfunded credit commitments	**956**	1,121	967	850	469
Allowance for credit losses	**$ 11,960**	12,540	12,512	13,169	14,971
Allowance for loan losses as a percentage of total loans	**1.15%**	1.18	1.26	1.43	1.76
Allowance for loan losses as a percentage of total net charge-offs	**376**	324	399	418	322
Allowance for credit losses as a percentage of total loans	**1.25**	1.30	1.37	1.53	1.82
Allowance for credit losses as a percentage of total nonaccrual loans	**149**	121	110	103	96

In addition to the allowance for credit losses, there was $474 million at December 31, 2017, and $954 million at December 31, 2016, of nonaccretable difference to absorb losses for PCI loans, which totaled $12.8 billion at December 31, 2017. The allowance for credit losses is lower than otherwise would have been required without PCI loan accounting. As a result of PCI loans, certain ratios of the Company may not be directly comparable with credit-related metrics for other financial institutions. Additionally, loans purchased at fair value, including loans from the GE Capital business acquisitions in 2016, generally reflect a lifetime credit loss adjustment and therefore do not initially require additions to the allowance as is typically associated with loan growth. For additional information on PCI loans, see the "Risk Management – Credit Risk Management – Purchased Credit-Impaired Loans" section, Note 1 (Summary of Significant Accounting Policies) and Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

The ratio of the allowance for credit losses to total nonaccrual loans may fluctuate significantly from period to period due to such factors as the mix of loan types in the portfolio, borrower credit strength and the value and marketability of collateral.

The allowance for credit losses decreased $580 million, or 5%, in 2017, due to a decrease in our commercial allowance reflecting credit quality improvement, including in the oil and gas portfolio, as well as improvement in our residential real estate portfolios, partially offset by increased allowance in the credit card, automobile and other revolving credit and installment portfolios. Total provision for credit losses was $2.5 billion in 2017, $3.8 billion in 2016 and $2.4 billion in 2015. The provision for credit losses was $400 million less than net charge-offs in 2017, reflecting improvement in the oil and gas portfolio, compared with $250 million more than net charge-offs in 2016. The 2015 provision was $450 million less than net charge-offs.

We believe the allowance for credit losses of $12.0 billion at December 31, 2017, was appropriate to cover credit losses inherent in the loan portfolio, including unfunded credit commitments, at that date. Approximately $694 million of the allowance at December 31, 2017, was allocated to our oil and gas portfolio, compared with $1.3 billion at December 31, 2016. This represented 5.6% and 8.5% of total oil and gas loans outstanding at December 31, 2017 and 2016, respectively. However, the entire allowance is available to absorb credit losses inherent in the total loan portfolio. The allowance for credit losses is subject to change and reflects existing factors as of the date of determination, including economic or market conditions and ongoing internal and external examination processes. Due to the sensitivity of the allowance for credit losses to changes in the economic and business environment, it is possible that we will incur incremental credit losses not anticipated as of the balance sheet date. Future allowance levels will be based on a variety of factors, including loan growth, portfolio performance and general economic conditions. Our process for determining the allowance for credit losses is discussed in the "Critical Accounting Policies – Allowance for Credit Losses" section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

LIABILITY FOR MORTGAGE LOAN REPURCHASE LOSSES
We sell residential mortgage loans to various parties, including (1) government-sponsored entities (GSEs) Federal Home Loan Mortgage Corporation (FHLMC) and Federal National Mortgage Association (FNMA) who include the mortgage loans in GSE-guaranteed mortgage securitizations, (2) SPEs that issue private label MBS, and (3) other financial institutions that purchase mortgage loans for investment or private label securitization. In addition, we pool FHA-insured and VA-guaranteed mortgage loans that are then used to back securities guaranteed by the Government National Mortgage Association (GNMA). We may be required to repurchase these mortgage loans, indemnify the securitization trust, investor or insurer, or reimburse the securitization trust, investor or insurer for credit losses incurred on loans (collectively, repurchase) in the event of a breach of contractual representations or warranties that is not remedied within a period (usually 90 days or less) after we receive notice of the breach.

In connection with our sales and securitization of residential mortgage loans to various parties, we have established a mortgage repurchase liability, initially at fair value, related to various representations and warranties that reflect management's estimate of losses for loans for which we could have a repurchase obligation, whether or not we currently service those loans, based on a combination of factors. Our mortgage repurchase liability estimation process also incorporates a forecast of repurchase demands associated with mortgage insurance rescission activity.

Because we typically retain the servicing for the mortgage loans we sell or securitize, we believe the quality of our residential mortgage loan servicing portfolio provides helpful information in evaluating our repurchase liability. Of the $1.6 trillion in the residential mortgage loan servicing portfolio at December 31, 2017, 95% was current and less than 1% was subprime at origination. Our combined delinquency and foreclosure rate on this portfolio was 5.14% at December 31, 2017, compared with 4.83% at December 31, 2016. Two percent of this portfolio is private label securitizations for which we originated the loans and, therefore, have some repurchase risk.

The overall level of unresolved repurchase demands and mortgage insurance rescissions outstanding at December 31, 2017, was $108 million, representing 482 loans, down from $125 million, or 597 loans, a year ago both in number of outstanding loans and in total dollar balances. The decrease was predominantly due to private investor demands resolved with minimal repurchase risk.

Customary with industry practice, we have the right of recourse against correspondent lenders from whom we have purchased loans with respect to representations and warranties. Historical recovery rates as well as projected lender performance are incorporated in the establishment of our mortgage repurchase liability.

We do not typically receive repurchase requests from GNMA, FHA and the Department of Housing and Urban Development (HUD) or VA. As an originator of an FHA-insured or VA-guaranteed loan, we are responsible for obtaining the insurance with the FHA or the guarantee with the VA. To the extent we are not able to obtain the insurance or the guarantee we must request permission to repurchase the loan from the GNMA pool. Such repurchases from GNMA pools typically represent a self-initiated process upon discovery of the uninsurable loan (usually within 180 days from funding of the loan). Alternatively, in lieu of repurchasing loans from GNMA pools, we may be asked by FHA/HUD or the VA to indemnify them (as applicable) for defects found in the Post Endorsement Technical Review process or audits performed by FHA/HUD or the VA. The Post Endorsement Technical Review is a process whereby HUD performs underwriting audits of closed/insured FHA loans for potential deficiencies. Our liability for mortgage loan repurchase losses incorporates probable losses associated with such indemnification.

Table 37 summarizes the changes in our mortgage repurchase liability. We incurred net losses on repurchased loans and investor reimbursements totaling $19 million in 2017, compared with $46 million in 2016.

Table 37: Changes in Mortgage Repurchase Liability

	Quarter ended				Year ended Dec 31,		
(in millions)	Dec 31, 2017	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017	2017	2016	2015
Balance, beginning of period	$ 179	178	222	229	229	378	615
Assumed with MSR purchases (1)	—	10	—	—	10	—	—
Provision for repurchase losses:							
Loan sales	4	6	6	8	24	36	43
Change in estimate (2)	2	(12)	(45)	(8)	(63)	(139)	(202)
Net additions (reductions)	6	(6)	(39)	—	(39)	(103)	(159)
Losses	(4)	(3)	(5)	(7)	(19)	(46)	(78)
Balance, end of period	$ 181	179	178	222	181	229	378

(1) Represents repurchase liability associated with portfolio of loans underlying mortgage servicing rights acquired during the period.
(2) Results from changes in investor demand and mortgage insurer practices, credit deterioration and changes in the financial stability of correspondent lenders.

Our liability for mortgage repurchases, included in "Accrued expenses and other liabilities" in our consolidated balance sheet, represents our best estimate of the probable loss that we expect to incur for various representations and warranties in the contractual provisions of our sales of mortgage loans. The mortgage repurchase liability estimation process requires management to make difficult, subjective and complex judgments about matters that are inherently uncertain, including demand expectations, economic factors, and the specific characteristics of the loans subject to repurchase. Our evaluation considers all vintages and the collective actions of the GSEs and their regulator, the Federal Housing Finance Agency (FHFA), mortgage insurers and our correspondent lenders. We maintain regular contact with the GSEs, the FHFA, and other significant investors to monitor their repurchase demand practices and issues as part of our process to update our repurchase liability estimate as new information becomes available. The liability was $181 million at December 31, 2017, and $229 million at December 31, 2016. In 2017, we released $39 million, which increased net gains on mortgage loan origination/sales activities, compared with a release of $103 million in 2016. The release in 2017 was predominantly due to assumption updates based on recently observed trends.

Because of the uncertainty in the various estimates underlying the mortgage repurchase liability, there is a range of losses in excess of the recorded mortgage repurchase liability that are reasonably possible. The estimate of the range of possible loss for representations and warranties does not represent a probable loss, and is based on currently available information, significant judgment, and a number of assumptions that are subject to change. The high end of this range of reasonably possible losses exceeded our recorded liability by $136 million at December 31, 2017, and was determined based upon modifying the assumptions (particularly to assume significant changes in investor repurchase demand practices) used in our best estimate of probable loss to reflect what we believe to be the high end of reasonably possible adverse assumptions. For additional information on our repurchase liability, see Note 9 (Mortgage Banking Activities) to Financial Statements in this Report.

RISKS RELATING TO SERVICING ACTIVITIES In addition to servicing loans in our portfolio, we act as servicer and/or master servicer of residential mortgage loans included in GSE-guaranteed mortgage securitizations, GNMA-guaranteed mortgage securitizations of FHA-insured/VA-guaranteed mortgages and private label mortgage securitizations, as well as for unsecuritized loans owned by institutional investors. The following discussion summarizes the primary duties and requirements of servicing and related industry developments.

The loans we service were originated by us or by other mortgage loan originators. As servicer, our primary duties are typically to (1) collect payments due from borrowers, (2) advance certain delinquent payments of principal and interest on the mortgage loans, (3) maintain and administer any hazard, title or primary mortgage insurance policies relating to the mortgage loans, (4) maintain any required escrow accounts for payment of taxes and insurance and administer escrow payments, (5) foreclose on defaulted mortgage loans or, to the extent consistent with the related servicing agreement, consider alternatives to foreclosure, such as loan modifications or short sales, and (6) for loans sold into private label securitizations, manage the foreclosed property through liquidation. As master servicer, our primary duties are typically to (1) supervise, monitor and oversee the servicing of the mortgage loans by the servicer, (2) consult with each servicer and use reasonable efforts to cause the servicer to observe its servicing obligations, (3) prepare monthly distribution statements to security holders and, if required by the securitization documents, certain periodic reports required to be filed with the SEC, (4) if required by the securitization documents, calculate distributions and loss allocations on the mortgage-backed securities, (5) prepare tax and information returns of the securitization trust, and (6) advance amounts required by non-affiliated servicers who fail to perform their advancing obligations.

Each agreement under which we act as servicer or master servicer generally specifies a standard of responsibility for actions we take in such capacity and provides protection against expenses and liabilities we incur when acting in compliance with the specified standard. For example, private label securitization agreements under which we act as servicer or master servicer typically provide that the servicer and the master servicer are entitled to indemnification by the securitization trust for taking action or refraining from taking action in good faith or for errors in judgment. However, we are not indemnified, but rather are required to indemnify the securitization trustee, against any failure by us, as servicer or master servicer, to perform our servicing obligations or against any of our acts or omissions that involve willful misfeasance, bad faith or gross negligence in the performance of, or reckless disregard of, our duties. In addition, if we commit a material breach of our obligations as servicer or master servicer, we may be subject to termination if the breach is not cured within a specified period following notice, which can generally be given by the securitization trustee or a specified percentage of security holders. Whole loan sale contracts under which we act as servicer generally include similar provisions with respect to our actions as servicer. The standards governing servicing in GSE-guaranteed securitizations, and the possible remedies for violations of such standards, vary, and those standards and remedies are determined by servicing guides maintained by the GSEs, contracts between the GSEs and individual servicers and topical guides published by the GSEs from time to time. Such remedies could include indemnification or repurchase of an affected mortgage loan. In addition, in connection with our servicing activities, we could become subject to consent orders and settlement agreements with federal and state regulators for alleged servicing issues and practices. In general, these can require us to provide customers with loan modification relief, refinancing relief, and foreclosure prevention and assistance, as well as can impose certain monetary penalties on us.

Asset/Liability Management

Asset/liability management involves evaluating, monitoring and managing interest rate risk, market risk, liquidity and funding. Primary oversight of interest rate risk and market risk resides with the Finance Committee of our Board of Directors (Board), which oversees the administration and effectiveness of financial risk management policies and processes used to assess and manage these risks. Primary oversight of liquidity and funding resides with the Risk Committee of the Board. At the management level we utilize a Corporate Asset/Liability Management Committee (Corporate ALCO), which consists of senior financial, risk, and business executives, to oversee these risks and report on them periodically to the Board's Finance Committee and Risk Committee as appropriate. As discussed in more detail for trading activities below, we employ separate management level oversight specific to market risk.

INTEREST RATE RISK Interest rate risk, which potentially can have a significant earnings impact, is an integral part of being a financial intermediary. We are subject to interest rate risk because:

- assets and liabilities may mature or reprice at different times (for example, if assets reprice faster than liabilities and interest rates are generally rising, earnings will initially increase);
- assets and liabilities may reprice at the same time but by different amounts (for example, when the general level of interest rates is rising, we may increase rates paid on checking and savings deposit accounts by an amount that is less than the general rise in market interest rates);
- short-term and long-term market interest rates may change by different amounts (for example, the shape of the yield curve may affect new loan yields and funding costs differently);
- the remaining maturity of various assets or liabilities may shorten or lengthen as interest rates change (for example, if long-term mortgage interest rates increase sharply, MBS held in the investment securities portfolio may pay down slower than anticipated, which could impact portfolio income); or
- interest rates may also have a direct or indirect effect on loan demand, collateral values, credit losses, mortgage origination volume, the fair value of MSRs and other financial instruments, the value of the pension liability and other items affecting earnings.

We assess interest rate risk by comparing outcomes under various net interest income simulations using many interest rate scenarios that differ in the direction of interest rate changes, the degree of change over time, the speed of change and the projected shape of the yield curve. These simulations require assumptions regarding drivers of earnings and balance sheet composition such as loan originations, prepayment speeds on loans and investment securities, deposit flows and mix, as well as pricing strategies.

Currently, our profile is such that we project net interest income will benefit modestly from higher interest rates as our assets would reprice faster and to a greater degree than our liabilities, while in the case of lower interest rates, our assets would reprice downward and to a greater degree than our liabilities.

Our most recent simulations estimate net interest income sensitivity over the next two years under a range of both lower and higher interest rates. Measured impacts from standardized ramps (gradual changes) and shocks (instantaneous changes) are summarized in Table 38, indicating net interest income sensitivity relative to the Company's base net interest income plan. Ramp scenarios assume interest rates move gradually in parallel across the yield curve relative to the base scenario in year one, and the full amount of the ramp is held as a constant differential to the base scenario in year two. The following describes the simulation assumptions for the scenarios presented in Table 38:

- Simulations are dynamic and reflect anticipated growth across assets and liabilities.
- Other macroeconomic variables that could be correlated with the changes in interest rates are held constant.
- Mortgage prepayment and origination assumptions vary across scenarios and reflect only the impact of the higher or lower interest rates.
- Our base scenario deposit forecast incorporates mix changes consistent with the base interest rate trajectory. Deposit mix is modeled to be the same as in the base scenario across the alternative scenarios. In higher rate scenarios, customer activity that shifts balances into higher-yielding products could reduce expected net interest income.
- We hold the size of the projected investment securities portfolio constant across scenarios.

Table 38: Net Interest Income Sensitivity Over Next Two-Year Horizon Relative to Base Expectation

		Lower Rates	Higher Rates	
($ in billions)	Base	100 bps Ramp Parallel Decrease	100 bps Instantaneous Parallel Increase	200 bps Ramp Parallel Increase
First Year of Forecasting Horizon				
Net Interest Income Sensitivity to Base Scenario		$ (1.2) - (0.7)	1.8 - 2.3	1.9 - 2.4
Key Rates at Horizon End				
Fed Funds Target	2.25 %	1.25	3.25	4.25
10-year CMT (1)	3.24	2.24	4.24	5.24
Second Year of Forecasting Horizon				
Net Interest Income Sensitivity to Base Scenario		$ (2.2) - (1.7)	2.5 - 3.0	4.3 - 4.8
Key Rates at Horizon End				
Fed Funds Target	2.75 %	1.75	3.75	4.75
10-year CMT (1)	3.77	2.77	4.77	5.77

(1) U.S. Constant Maturity Treasury Rate

Between 2014 and 2016, we entered into receive fixed interest rate swaps to hedge our LIBOR-based commercial loans, when the expectation was for interest rates to be lower for longer. By doing so, we converted lower-yielding floating rate loans into higher-yielding fixed rate loans. At the peak, we had $86 billion in notional value of loan swaps. Given our desire to be modestly more asset sensitive, we began unwinding these hedges in third quarter 2017, and have currently unwound all these interest rate swaps. Elimination of these swaps will reduce interest income from these loans in 2018, but it has increased our sensitivity to changes in interest rates. Since the swaps were entered into they generated incremental net interest income of approximately $3 billion. The pre-tax loss in other comprehensive income at the time of unwinding the swaps was $1 billion and will be amortized to loan interest income over the remaining life of the original contracts, which is approximately 3 years. The sensitivity results presented in Table 38 reflect the full swap portfolio unwinds to best illustrate our profile after the swap repositioning.

The sensitivity results above do not capture interest rate sensitive noninterest income and expense impacts. Our interest rate sensitive noninterest income and expense is primarily driven by mortgage activity, and may move in the opposite direction of our net interest income. Typically, in response to higher interest rates, mortgage activity, primarily refinancing activity, generally declines. And in response to lower interest rates, mortgage activity generally increases. Mortgage results are also impacted by the valuation of MSRs and related hedge positions. See the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk" section in this Report for more information.

We use the investment securities portfolio and exchange-traded and over-the-counter (OTC) interest rate derivatives to hedge our interest rate exposures. See the "Balance Sheet Analysis – Investment Securities" section in this Report for more information on the use of the available-for-sale and held-to-maturity securities portfolios. The notional or contractual amount, credit risk amount and fair value of the derivatives used to hedge our interest rate risk exposures as of December 31, 2017, and December 31, 2016, are presented in Note 16 (Derivatives) to Financial Statements in this Report. We use derivatives for asset/liability management in two main ways:

- to convert the cash flows from selected asset and/or liability instruments/portfolios including investments, commercial loans and long-term debt, from fixed-rate payments to floating-rate payments, or vice versa; and
- to economically hedge our mortgage origination pipeline, funded mortgage loans and MSRs using interest rate swaps, swaptions, futures, forwards and options.

MORTGAGE BANKING INTEREST RATE AND MARKET RISK

We originate, fund and service mortgage loans, which subjects us to various risks, including credit, liquidity and interest rate risks. Based on market conditions and other factors, we reduce credit and liquidity risks by selling or securitizing a majority of the long-term fixed-rate mortgage and ARM loans we originate. On the other hand, we may hold originated ARMs and fixed-rate mortgage loans in our loan portfolio as an investment for our growing base of deposits. We determine whether the loans will be held for investment or held for sale at the time of commitment. We may subsequently change our intent to hold loans for investment and sell some or all of our ARMs or fixed-rate mortgages as part of our corporate asset/liability management. We may also acquire and add to our securities available for sale a portion of the securities issued at the time we securitize MHFS.

Interest rate and market risk can be substantial in the mortgage business. Changes in interest rates may potentially reduce total origination and servicing fees, the value of our residential MSRs measured at fair value, the value of MHFS and the associated income and loss reflected in mortgage banking noninterest income, the income and expense associated with instruments (economic hedges) used to hedge changes in the fair value of MSRs and MHFS, and the value of derivative loan commitments (interest rate "locks") extended to mortgage applicants.

Interest rates affect the amount and timing of origination and servicing fees because consumer demand for new mortgages and the level of refinancing activity are sensitive to changes in mortgage interest rates. Typically, a decline in mortgage interest rates will lead to an increase in mortgage originations and fees and may also lead to an increase in servicing fee income, depending on the level of new loans added to the servicing portfolio and prepayments. Given the time it takes for consumer behavior to fully react to interest rate changes, as well as the time required for processing a new application, providing the commitment, and securitizing and selling the loan, interest rate changes will affect origination and servicing fees with a lag. The amount and timing of the impact on origination and servicing fees will depend on the magnitude, speed and duration of the change in interest rates.

We measure originations of MHFS at fair value where an active secondary market and readily available market prices exist to reliably support fair value pricing models used for these loans. Loan origination fees on these loans are recorded when earned, and related direct loan origination costs are recognized when incurred. We also measure at fair value certain of our other interests held related to residential loan sales and securitizations. We believe fair value measurement for MHFS and other interests held, which we hedge with free-standing derivatives (economic hedges) along with our MSRs measured at fair value, reduces certain timing differences and better matches changes in the value of these assets with changes in the value of derivatives used as economic hedges for these assets. During 2015, 2016, and most of 2017, in response to continued secondary market illiquidity, we continued to originate certain prime non-agency loans to be held for investment for the foreseeable future rather than to be held for sale.

We initially measure all of our MSRs at fair value and carry substantially all of them at fair value depending on our strategy for managing interest rate risk. Under this method, the MSRs are recorded at fair value at the time we sell or securitize the related mortgage loans. The carrying value of MSRs carried at fair value reflects changes in fair value at the end of each quarter and changes are included in net servicing income, a component of mortgage banking noninterest income. If the fair value of the MSRs increases, income is recognized; if the fair value of the MSRs decreases, a loss is recognized. We use a dynamic and sophisticated model to estimate the fair value of our MSRs and periodically benchmark our estimates to independent appraisals. The valuation of MSRs can be highly subjective and involve complex judgments by management about matters that are inherently unpredictable. See "Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights" section in this Report for additional information. Changes in interest rates influence a variety of significant assumptions included in the periodic valuation of MSRs, including prepayment speeds, expected returns and potential risks on the servicing asset portfolio, the value of escrow balances and other servicing valuation elements.

An increase in interest rates generally reduces the propensity for refinancing, extends the expected duration of the servicing portfolio and, therefore, increases the estimated fair value of the MSRs. However, an increase in interest rates can also reduce mortgage loan demand and, therefore, reduce origination income. A decline in interest rates generally increases the propensity for refinancing, reduces the expected duration of the servicing portfolio and therefore reduces the estimated fair value of MSRs. This reduction in fair value causes a charge to income for MSRs carried at fair value, net of any gains on free-standing derivatives (economic hedges) used to hedge MSRs. We may choose not to fully hedge the entire potential decline in the value of our MSRs resulting from a decline in interest rates because the potential increase in origination/servicing fees in that scenario provides a partial "natural business hedge."

The price risk associated with our MSRs is economically hedged with a combination of highly liquid interest rate forward instruments including mortgage forward contracts, interest rate swaps and interest rate options. All of the instruments included in the hedge are marked to market daily. Because the hedging instruments are traded in predominantly highly liquid markets, their prices are readily observable and are fully reflected in each quarter's mark to market. Quarterly MSR hedging results include a combination of directional gain or loss due to market changes as well as any carry income generated. If the economic hedge is effective, its overall directional hedge gain or loss will offset the change in the valuation of the underlying MSR asset. Gains or losses associated with these economic hedges are included in mortgage banking noninterest income. Consistent with our longstanding approach to hedging interest rate risk in the mortgage business, the size of the hedge and the particular combination of forward hedging instruments at any point in time is designed to reduce the volatility of the mortgage business's earnings over various time frames within a range of mortgage interest rates. Because market factors, the composition of the mortgage servicing portfolio and the relationship between the origination and servicing sides of our mortgage business change continually, the types of instruments used in our hedging are reviewed daily and rebalanced based on our evaluation of current market factors and the interest rate risk inherent in our MSRs portfolio. Throughout 2017, our economic hedging strategy generally used forward mortgage purchase contracts that were effective at offsetting the impact of interest rates on the value of the MSR asset.

Mortgage forward contracts are designed to pass the full economics of the underlying reference mortgage securities to the holder of the contract, including both the directional gain and loss from the forward delivery of the reference securities and the corresponding carry income. Carry income represents the contract's price accretion from the forward delivery price to the spot price including both the yield earned on the reference securities and the market implied cost of financing during the period. The actual amount of carry income earned on the hedge each quarter will depend on the amount of the underlying asset that is hedged and the particular instruments included in the hedge. The level of carry income is driven by the slope of the yield curve and other market driven supply and demand factors affecting the specific reference securities. A steep yield curve generally produces higher carry income while a flat or inverted yield curve can result in lower or potentially negative carry income. The level of carry income is also affected by the type of instrument used. In general, mortgage forward contracts tend to produce higher carry income than interest rate swap contracts. Carry income is recognized over the life of the mortgage forward as a component of the contract's mark to market gain or loss.

Hedging the various sources of interest rate risk in mortgage banking is a complex process that requires sophisticated modeling and constant monitoring. While we attempt to balance these various aspects of the mortgage business, there are several potential risks to earnings:

- Valuation changes for MSRs associated with interest rate changes are recorded in earnings immediately within the accounting period in which those interest rate changes occur, whereas the impact of those same changes in interest rates on origination and servicing fees occur with a lag and over time. Thus, the mortgage business could be protected from adverse changes in interest rates over a period of time on a cumulative basis but still display large variations in income from one accounting period to the next.
- The degree to which our net gains on loan originations offsets valuation changes for MSRs is imperfect, varies at different points in the interest rate cycle, and depends not just on the direction of interest rates but on the pattern of quarterly interest rate changes.
- Origination volumes, the valuation of MSRs and hedging results and associated costs are also affected by many factors. Such factors include the mix of new business between ARMs and fixed-rate mortgages, the relationship between short-term and long-term interest rates, the degree of volatility in interest rates, the relationship between mortgage interest rates and other interest rate markets, and other interest rate factors. Additional factors that can impact the valuation of the MSRs include changes in servicing and foreclosure costs due to changes in investor or regulatory guidelines, as well as individual state foreclosure legislation, and changes in discount rates due to market participants requiring a higher return due to updated market expectations on costs and risks associated with investing in MSRs. Many of these factors are hard to predict and we may not be able to directly or perfectly hedge their effect.
- While our hedging activities are designed to balance our mortgage banking interest rate risks, the financial instruments we use may not perfectly correlate with the values and income being hedged. For example, the change in the value of ARM production held for sale from changes in mortgage interest rates may or may not be fully offset by LIBOR index-based financial instruments used as economic hedges for such ARMs. Additionally, hedge-carry income on our economic hedges for the MSRs may not continue at recent levels if the spread between short-term and long-term rates decreases, or there are other changes in the market for mortgage forwards that affect the implied carry.

The total carrying value of our residential and commercial MSRs was $15.0 billion and $14.4 billion at December 31, 2017 and 2016, respectively. The weighted-average note rate on our portfolio of loans serviced for others was 4.23% and 4.26% at December 31, 2017 and 2016, respectively. The carrying value of our total MSRs represented 0.88% and 0.85% of mortgage loans serviced for others at December 31, 2017 and 2016, respectively.

As part of our mortgage banking activities, we enter into commitments to fund residential mortgage loans at specified times in the future. A mortgage loan commitment is an interest rate lock that binds us to lend funds to a potential borrower at a specified interest rate and within a specified period of time, generally up to 60 days after inception of the rate lock. These loan commitments are derivative loan commitments if the loans that will result from the exercise of the commitments will be held for sale. These derivative loan commitments are recognized at fair value on the balance sheet with changes in their fair values recorded as part of mortgage banking noninterest income. The fair value of these commitments include, at inception and during the life of the loan commitment, the expected net future cash flows related to the associated servicing of the loan as part of the fair value measurement of derivative loan commitments. Changes subsequent to inception are based on changes in fair value of the underlying loan resulting from the exercise of the commitment and changes in the probability that the loan will not fund within the terms of the commitment, referred to as a fall-out factor. The value of the underlying loan commitment is affected by changes in interest rates and the passage of time.

Outstanding derivative loan commitments expose us to the risk that the price of the mortgage loans underlying the commitments might decline due to increases in mortgage interest rates from inception of the rate lock to the funding of the loan. To minimize this risk, we employ mortgage forwards and options and Eurodollar futures and options contracts as economic hedges against the potential decreases in the values of the loans. We expect that these derivative financial instruments will experience changes in fair value that will either fully or partially offset the changes in fair value of the derivative loan commitments. However, changes in investor demand, such as concerns about credit risk, can also cause changes in the spread relationships between underlying loan value and the derivative financial instruments that cannot be hedged.

MARKET RISK – TRADING ACTIVITIES The Finance Committee of our Board of Directors reviews the acceptable market risk appetite for our trading activities. We engage in trading activities to accommodate the investment and risk management activities of our customers (which generally comprises a subset of the transactions recorded as trading and derivative assets and liabilities on our balance sheet), and to execute economic hedging to manage certain balance sheet risks. These activities mostly occur within our Wholesale Banking businesses and to a lesser extent other divisions of the Company. All of our trading assets, and derivative assets and liabilities (including securities, foreign exchange transactions and commodity transactions) are carried at fair value. Income earned related to these trading activities include net interest income and changes in fair value related to trading assets and derivative assets and liabilities. Net interest income earned from trading activity is reflected in the interest income and interest expense components of our income statement. Changes in fair value related to trading assets, and derivative assets and liabilities are reflected in net gains on trading activities, a component of noninterest income in our income statement.

Table 39 presents total revenue from trading activities.

Table 39: Net Gains (Losses) from Trading Activities

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Interest income (1)	$ **2,928**	2,506	1,971
Less: Interest expense (2)	**416**	354	357
Net interest income	**2,512**	2,152	1,614
Noninterest income:			
Net gains (losses) from trading activities (3):			
Customer accommodation	**835**	828	806
Economic hedges and other (4)	**218**	6	(192)
Total net gains from trading activities	**1,053**	834	614
Total trading-related net interest and noninterest income	$ **3,565**	2,986	2,228

(1) Represents interest and dividend income earned on trading securities.
(2) Represents interest and dividend expense incurred on trading securities we have sold but have not yet purchased.
(3) Represents realized gains (losses) from our trading activity and unrealized gains (losses) due to changes in fair value of our trading positions, attributable to the type of business activity.
(4) Excludes economic hedging of mortgage banking and asset/liability management activities, for which hedge results (realized and unrealized) are reported with the respective hedged activities.

Customer accommodation Customer accommodation activities are conducted to help customers manage their investment and risk management needs. We engage in market-making activities or act as an intermediary to purchase or sell financial instruments in anticipation of or in response to customer needs. This category also includes positions we use to manage our exposure to customer transactions.

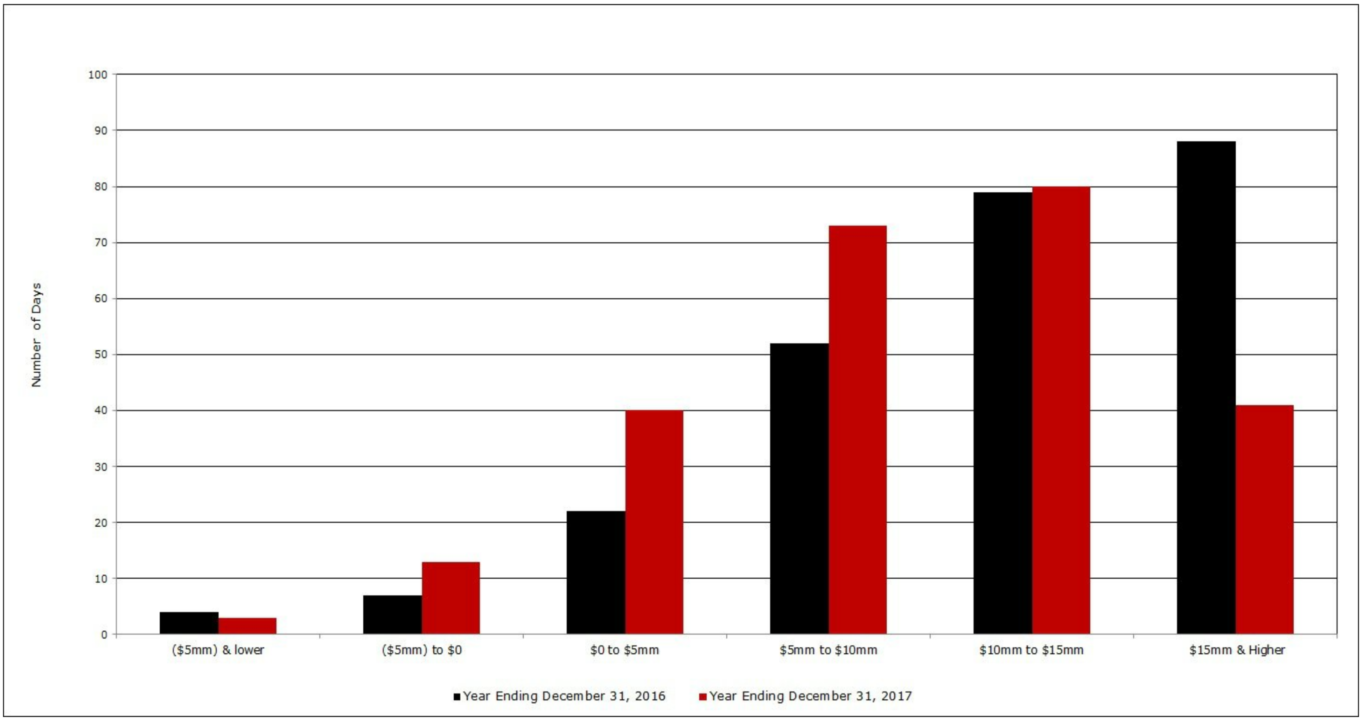
In our customer accommodation trading, we serve as intermediary between buyer and seller. For example, we may purchase or sell a derivative to a customer who wants to manage interest rate risk exposure. We typically enter into offsetting derivative or security positions with a separate counterparty or exchange to manage our exposure to the derivative with our customer. We earn income on this activity based on the transaction price difference between the customer and offsetting derivative or security positions, which is reflected in the fair value changes of the positions recorded in net gains on trading activities.

Customer accommodation trading also includes net gains related to market-making activities in which we take positions to facilitate customer order flow. For example, we may own securities recorded as trading assets (long positions) or sold securities we have not yet purchased, recorded as trading liabilities (short positions), typically on a short-term basis, to facilitate support of buying and selling demand from our customers. As a market maker in these securities, we earn income due to: (1) the difference between the price paid or received for the purchase and sale of the security (bid-ask spread), (2) the net interest income, and (3) the change in fair value of the long or short positions during the short-term period held on our balance sheet. Additionally, we may enter into separate derivative or security positions to manage our exposure related to our long or short security positions. Income earned on this type of market-making activity is reflected in the fair value changes of these positions recorded in net gains on trading activities.

Economic hedges and other Economic hedges in trading activities are not designated in a hedge accounting relationship and exclude economic hedging related to our asset/liability risk management and mortgage banking risk management activities. Economic hedging activities include the use of trading securities to economically hedge risk exposures related to non-trading activities or derivatives to hedge risk exposures related to trading assets or trading liabilities. Economic hedges are unrelated to our customer accommodation activities. Other activities include financial assets held for investment purposes that we elected to carry at fair value with changes in fair value recorded to earnings in order to mitigate accounting measurement mismatches or avoid embedded derivative accounting complexities.

Daily Trading-Related Revenue Table 40 provides information on the distribution of daily trading-related revenues for the Company's trading portfolio. This trading-related revenue is defined as the change in value of the trading assets and trading liabilities, trading-related net interest income, and trading-related intra-day gains and losses. Net trading-related revenue does not include activity related to long-term positions held for economic hedging purposes, period-end adjustments, and other activity not representative of daily price changes driven by market factors.

Table 40: Distribution of Daily Trading-Related Revenues



Market risk is the risk of possible economic loss from adverse changes in market risk factors such as interest rates, credit spreads, foreign exchange rates, equity, commodity prices, mortgage rates, and market liquidity. Market risk is intrinsic to the Company's sales and trading, market making, investing, and risk management activities.

The Company uses value-at-risk (VaR) metrics complemented with sensitivity analysis and stress testing in measuring and monitoring market risk. These market risk measures are monitored at both the business unit level and at aggregated levels on a daily basis. Our corporate market risk management function aggregates and monitors all exposures to ensure risk measures are within our established risk appetite. Changes to the market risk profile are analyzed and reported on a daily basis. The Company monitors various market risk exposure measures from a variety of perspectives, including line of business, product, risk type, and legal entity.

VaR is a statistical risk measure used to estimate the potential loss from adverse moves in the financial markets. The VaR measures assume that historical changes in market values (historical simulation analysis) are representative of the potential future outcomes and measure the expected loss over a given time interval (for example, 1 day or 10 days) at a given confidence level. Our historical simulation analysis approach uses historical observations of daily changes in each of the market risk factors from each trading day in the previous 12 months. The risk drivers of each market risk exposure are updated on a daily basis. We measure and report VaR for 1-day and 10-day holding periods at a 99% confidence level. This means we would expect to incur single day losses greater than predicted by VaR estimates for the measured positions one time in every 100 trading days. We treat data from all historical periods as equally relevant and consider using data for the previous 12 months as appropriate for determining VaR. We believe using a 12-month look-back period helps ensure the Company's VaR is responsive to current market conditions.

VaR measurement between different financial institutions is not readily comparable due to modeling and assumption differences from company to company. VaR measures are more useful when interpreted as an indication of trends rather than an absolute measure to be compared across financial institutions. VaR models are subject to limitations which include, but are not limited to, the use of historical changes in market factors that may not accurately reflect future changes in market factors, and the inability to predict market liquidity in extreme market conditions. All limitations such as model inputs, model assumptions, and calculation methodology risk are monitored by the Corporate Market Risk Group and the Corporate Model Risk Group.

The VaR models measure exposure to the following categories:
- credit risk – exposures from corporate credit spreads, asset-backed security spreads, and mortgage prepayments.
- interest rate risk – exposures from changes in the level, slope, and curvature of interest rate curves and the volatility of interest rates.
- equity risk – exposures to changes in equity prices and volatilities of single name, index, and basket exposures.
- commodity risk – exposures to changes in commodity prices and volatilities.
- foreign exchange risk – exposures to changes in foreign exchange rates and volatilities.

VaR is a primary market risk management measure for assets and liabilities classified as trading positions and is used as a supplemental analysis tool to monitor exposures classified as available for sale (AFS) and other exposures that we carry at fair value.

Trading VaR is the measure used to provide insight into the market risk exhibited by the Company's trading positions. The Company calculates Trading VaR for risk management purposes to establish line of business and Company-wide risk limits. Trading VaR is calculated based on all trading positions classified as trading assets, other liabilities, derivative assets or derivative liabilities on our balance sheet.

Table 41 shows the Company's Trading General VaR by risk category. The average Company Trading General VaR for 2017 was $21 million with a low of $11 million and high of $31 million.

Table 41: Trading 1-Day 99% General VaR by Risk Category

								Year ended
	December 31, 2017				December 31, 2016			
(in millions)	**Period end**	**Average**	**Low**	**High**	Period end	Average	Low	High
Company Trading General VaR Risk Categories								
Credit	**$ 12**	**24**	**11**	**36**	20	17	12	32
Interest rate	**13**	**15**	**6**	**27**	13	12	5	23
Equity	**10**	**12**	**9**	**17**	14	15	11	19
Commodity	**1**	**1**	**1**	**2**	1	2	1	4
Foreign exchange	**0**	**1**	**0**	**1**	0	1	0	14
Diversification benefit (1)	**(24)**	**(32)**			(25)	(26)		
Company Trading General VaR	**$ 12**	**21**	**11**	**31**	23	21	15	27

(1) The period-end VaR was less than the sum of the VaR components described above, which is due to portfolio diversification. The diversification effect arises because the risks are not perfectly correlated causing a portfolio of positions to usually be less risky than the sum of the risks of the positions alone. The diversification benefit is not meaningful for low and high metrics since they may occur on different days.

Sensitivity Analysis Given the inherent limitations of the VaR models, the Company uses other measures, including sensitivity analysis, to measure and monitor risk. Sensitivity analysis is the measure of exposure to a single risk factor, such as a 0.01% increase in interest rates or a 1% increase in equity prices. We conduct and monitor sensitivity on interest rates, credit spreads, volatility, equity, commodity, and foreign exchange exposure. Sensitivity analysis complements VaR as it provides an indication of risk relative to each factor irrespective of historical market moves.

Stress Testing While VaR captures the risk of loss due to adverse changes in markets using recent historical market data, stress testing is designed to capture the Company's exposure to extreme but low probability market movements. Stress scenarios estimate the risk of losses based on management's assumptions of abnormal but severe market movements such as severe credit spread widening or a large decline in equity prices. These scenarios assume that the market moves happen instantaneously and no repositioning or hedging activity takes place to mitigate losses as events unfold (a conservative approach since experience demonstrates otherwise).

An inventory of scenarios is maintained representing both historical and hypothetical stress events that affect a broad range of market risk factors with varying degrees of correlation and differing time horizons. Hypothetical scenarios assess the impact of large movements in financial variables on portfolio values. Typical examples include a 1% (100 basis point) increase across the yield curve or a 10% decline in equity market indexes. Historical scenarios utilize an event-driven approach: the stress scenarios are based on plausible but rare events, and the analysis addresses how these events might affect the risk factors relevant to a portfolio.

The Company's stress testing framework is also used in calculating results in support of the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) and internal stress tests. Stress scenarios are regularly reviewed and updated to address potential market events or concerns. For more detail on the CCAR process, see the "Capital Management" section in this Report.

Regulatory Market Risk Capital reflects U.S. regulatory agency risk-based capital regulations that are based on the Basel Committee Capital Accord of the Basel Committee on Banking Supervision. The Company must calculate regulatory capital under the Basel III market risk capital rule, which requires banking organizations with significant trading activities to adjust their capital requirements to reflect the market risks of those activities based on comprehensive and risk sensitive methods and models. The market risk capital rule is intended to cover the risk of loss in value of covered positions due to changes in market conditions.

Composition of Material Portfolio of Covered Positions The positions that are "covered" by the market risk capital rule are generally a subset of our trading assets, and derivative assets and liabilities, specifically those held by the Company for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits. Positions excluded from market risk regulatory capital treatment are subject to the credit risk capital rules applicable to the "non-covered" trading positions.

The material portfolio of the Company's "covered" positions is mostly concentrated in the trading assets, and derivative assets and liabilities within Wholesale Banking where the substantial portion of market risk capital resides. Wholesale Banking engages in the fixed income, traded credit, foreign exchange, equities, and commodities markets businesses. Other business segments hold smaller trading positions covered under the market risk capital rule.

Regulatory Market Risk Capital Components The capital required for market risk on the Company's "covered" positions is determined by internally developed models or standardized specific risk charges. The market risk regulatory capital models are subject to internal model risk management and validation. The models are continuously monitored and enhanced in response to changes in market conditions, improvements in system capabilities, and changes in the Company's market risk exposure. The Company is required to obtain and has received prior written approval from its regulators before using its internally developed models to calculate the market risk capital charge.

Basel III prescribes various VaR measures in the determination of regulatory capital and risk-weighted assets (RWAs). The Company uses the same VaR models for both market risk management purposes as well as regulatory capital calculations. For regulatory purposes, we use the following metrics to determine the Company's market risk capital requirements:

General VaR measures the risk of broad market movements such as changes in the level of credit spreads, interest rates, equity prices, commodity prices, and foreign exchange rates. General VaR uses historical simulation analysis based on 99% confidence level and a 10-day holding period.

Table 42 shows the General VaR measure categorized by major risk categories. The average 10-day Company Regulatory General VaR for 2017 was $29 million with a low of $17 million and high of $45 million.

Table 42: Regulatory 10-Day 99% General VaR by Risk Category

									Year ended
		December 31, 2017				December 31, 2016			
(in millions)		**Period end**	**Average**	**Low**	**High**	Period end	Average	Low	High
Wholesale Regulatory General VaR Risk Categories									
Credit	**$**	**43**	**65**	**31**	**96**	47	33	18	83
Interest rate		**22**	**29**	**11**	**71**	28	30	9	56
Equity		**4**	**6**	**1**	**23**	3	4	(0)	12
Commodity		**3**	**5**	**2**	**21**	6	6	1	23
Foreign exchange		**1**	**5**	**1**	**29**	3	3	1	25
Diversification benefit (1)		**(42)**	**(83)**			(69)	(51)		
Wholesale Regulatory General VaR	**$**	**31**	**27**	**16**	**42**	18	25	7	54
Company Regulatory General VaR		**33**	**29**	**17**	**45**	21	26	6	56

(1) The period-end VaR was less than the sum of the VaR components described above, which is due to portfolio diversification. The diversification benefit arises because the risks are not perfectly correlated causing a portfolio of positions to usually be less risky than the sum of the risks of the positions alone. The diversification benefit is not meaningful for low and high metrics since they may occur on different days.

Specific Risk measures the risk of loss that could result from factors other than broad market movements, or name-specific market risk. Specific Risk uses Monte Carlo simulation analysis based on a 99% confidence level and a 10-day holding period.

Total VaR (as presented in Table 43) is composed of General VaR and Specific Risk and uses the previous 12 months of historical market data in compliance with regulatory requirements.

Total Stressed VaR (as presented in Table 43) uses a historical period of significant financial stress over a continuous 12 month period using historically available market data and is composed of Stressed General VaR and Stressed Specific Risk. Total Stressed VaR uses the same methodology and models as Total VaR.

Incremental Risk Charge (as presented in Table 43) captures losses due to both issuer default and migration risk at the 99.9% confidence level over the one-year capital horizon under the assumption of constant level of risk or a constant position assumption. The model covers all non-securitized credit-sensitive trading products.

The Company calculates Incremental Risk by generating a portfolio loss distribution using Monte Carlo simulation, which assumes numerous scenarios, where an assumption is made that the portfolio's composition remains constant for a one-year time horizon. Individual issuer credit grade migration and issuer default risk is modeled through generation of the issuer's credit rating transition based upon statistical modeling. Correlation between credit grade migration and default is captured by a multifactor proprietary model which takes into account industry classifications as well as regional effects. Additionally, the impact of market and issuer specific concentrations is reflected in the modeling framework by assignment of a higher charge for portfolios that have increasing concentrations in particular issuers or sectors. Lastly, the model captures product basis risk; that is, it reflects the material disparity between a position and its hedge.

Table 43 provides information on Total VaR, Total Stressed VaR and the Incremental Risk Charge results for the quarter ended December 31, 2017. Incremental Risk Charge uses the higher of the quarterly average or the quarter end result. For the fourth quarter, the required capital for market risk equals the quarter end result.

Table 43: Market Risk Regulatory Capital Modeled Components

	Quarter ended December 31, 2017				December 31, 2017	
(in millions)	Average	Low	High	Quarter end	Risk-based capital (1)	Risk-weighted assets (1)
Total VaR	$ 51	43	66	51	153	1,913
Total Stressed VaR	339	277	430	361	1,017	12,709
Incremental Risk Charge	57	35	86	63	63	790

(1) Results represent the risk-based capital and RWAs based on the VaR and Incremental Risk Charge models.

Securitized Products Charge Basel III requires a separate market risk capital charge for positions classified as a securitization or re-securitization. The primary criteria for classification as a securitization are whether there is a transfer of risk and whether the credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority. Covered trading securitizations positions include consumer and commercial asset-backed securities (ABS), commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS), and collateralized loan and other debt obligations (CLO/CDO) positions. The securitization capital requirements are the greater of the capital requirements of the net long or short exposure, and are capped at the maximum loss that could be incurred on any given transaction.

Table 44 shows the aggregate net fair market value of securities and derivative securitization positions by exposure type that meet the regulatory definition of a covered trading securitization position at December 31, 2017 and 2016.

Table 44: Covered Securitization Positions by Exposure Type (Net Market Value)

(in millions)	ABS	CMBS	RMBS	CLO/CDO
December 31, 2017				
Securitization exposure:				
Securities	**$ 719**	**257**	**805**	**913**
Derivatives	**3**	**(5)**	**0**	**(1)**
Total	**$ 722**	**252**	**805**	**912**
December 31, 2016				
Securitization Exposure:				
Securities	$ 801	397	911	791
Derivatives	3	4	1	(8)
Total	$ 804	401	912	783

Securitization Due Diligence and Risk Monitoring The market risk capital rule requires that the Company conduct due diligence on the risk of each securitization position within three days of its purchase. The Company's due diligence seeks to provide an understanding of the features that would materially affect the performance of a securitization or re-securitization. The due diligence analysis is re-performed on a quarterly basis for each securitization and re-securitization position. The Company uses an automated solution to track the due diligence associated with securitization activity. The Company aims to manage the risks associated with securitization and re-securitization positions through the use of offsetting positions and portfolio diversification.

Standardized Specific Risk Charge For debt and equity positions that are not evaluated by the approved internal specific risk models, a regulatory prescribed standard specific risk charge is applied. The standard specific risk add-on for sovereign entities, public sector entities, and depository institutions is based on the Organization for Economic Co-operation and Development (OECD) country risk classifications (CRC) and the remaining contractual maturity of the position. These risk add-ons for debt positions range from 0.25% to 12%. The add-on for corporate debt is based on creditworthiness and the remaining contractual maturity of the position. All other types of debt positions are subject to an 8% add-on. The standard specific risk add-on for equity positions is generally 8%.

Comprehensive Risk Charge/Correlation Trading The market risk capital rule requires capital for correlation trading positions. The Company's remaining correlation trading exposure covered under the market risk capital rule matured in fourth quarter 2014.

Table 45 summarizes the market risk-based capital requirements charge and market RWAs in accordance with the Basel III market risk capital rule as of December 31, 2017 and 2016. The market RWAs are calculated as the sum of the components in the table below.

Table 45: Market Risk Regulatory Capital and RWAs

	December 31, 2017		December 31, 2016	
(in millions)	**Risk-based capital**	**Risk-weighted assets**	Risk-based capital	Risk-weighted assets
Total VaR	**$ 153**	**1,913**	247	3,091
Total Stressed VaR	**1,017**	**12,709**	1,135	14,183
Incremental Risk Charge	**63**	**790**	217	2,710
Securitized Products Charge	**576**	**7,203**	561	7,007
Standardized Specific Risk Charge	**1,076**	**13,454**	1,357	16,962
De minimis Charges (positions not included in models)	**8**	**99**	11	147
Total	**$ 2,893**	**36,168**	3,528	44,100

RWA Rollforward Table 46 depicts the changes in market risk regulatory capital and RWAs under Basel III for the full year and fourth quarter of 2017.

Table 46: Analysis of Changes in Market Risk Regulatory Capital and RWAs

(in millions)	Risk-based capital	Risk-weighted assets
Balance, December 31, 2016	$ 3,528	44,100
Total VaR	(94)	(1,178)
Total Stressed VaR	(118)	(1,474)
Incremental Risk Charge	(154)	(1,920)
Securitized Products Charge	16	196
Standardized Specific Risk Charge	(281)	(3,508)
De minimis Charges	(4)	(48)
Balance, December 31, 2017	$ 2,893	36,168
Balance, September 30, 2017	$ 2,970	37,130
Total VaR	(10)	(126)
Total Stressed VaR	180	2,248
Incremental Risk Charge	29	368
Securitized Products Charge	(101)	(1,266)
Standardized Specific Risk Charge	(172)	(2,152)
De minimis Charges	(3)	(34)
Balance, December 31, 2017	$ 2,893	36,168

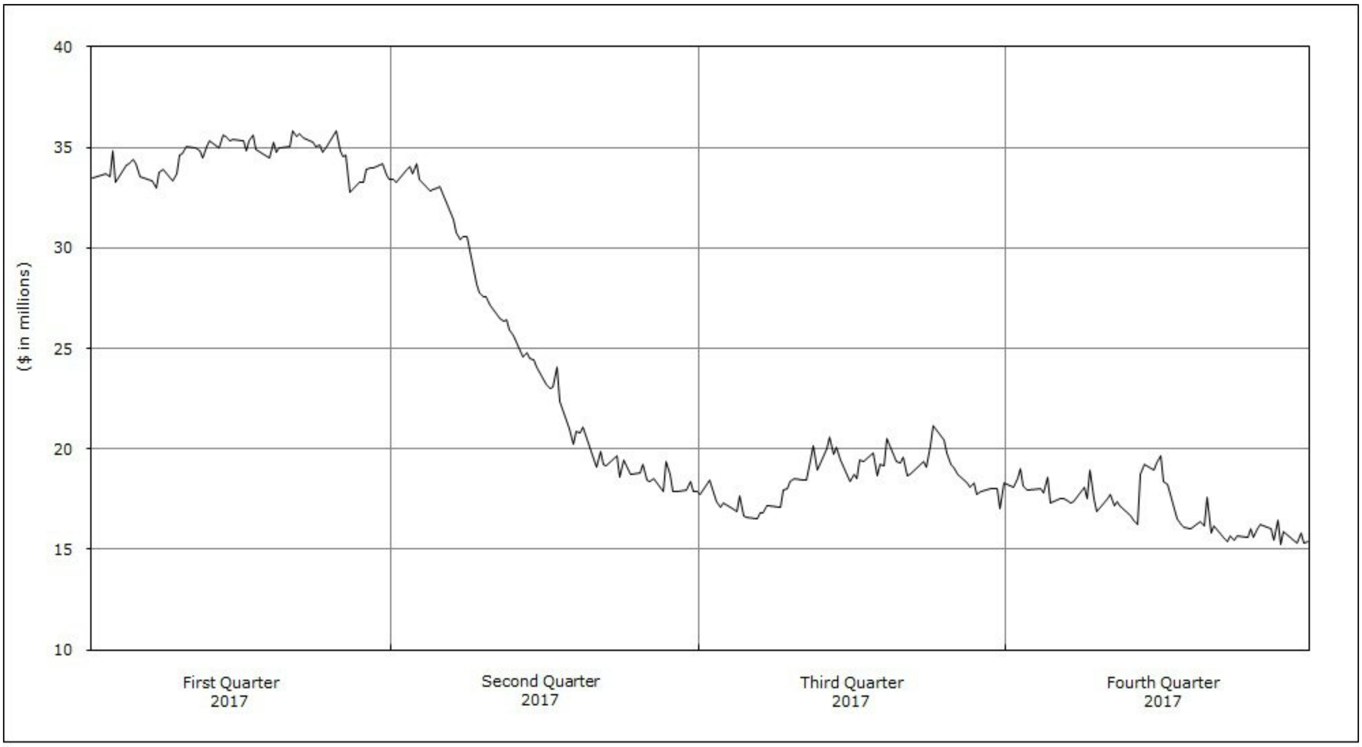
The largest contributor to the changes to market risk regulatory capital and RWAs for fourth quarter 2017 was associated with changes in positions due to normal trading activity.

VaR Backtesting The market risk capital rule requires backtesting as one form of validation of the VaR model. Backtesting is a comparison of the daily VaR estimate with the actual clean profit and loss (clean P&L) as defined by the market risk capital rule. Clean P&L is the change in the value of the Company's covered trading positions that would have occurred had previous end-of-day covered trading positions remained unchanged (therefore, excluding fees, commissions, net interest income, and intraday trading gains and losses). The backtesting analysis compares the daily Total VaR for each of the trading days in the preceding 12 months with the net clean P&L. Clean P&L does not include credit adjustments and other activity not representative of daily price changes driven by market risk factors. The clean P&L measure of revenue is used to evaluate the performance of the Total VaR and is not comparable to our actual daily trading net revenues, as reported elsewhere in this Report.

Any observed clean P&L loss in excess of the Total VaR is considered a market risk regulatory capital backtesting exception. The actual number of exceptions (that is, the number of business days for which the clean P&L losses exceed the corresponding 1-day, 99% Total VaR measure) over the preceding 12 months is used to determine the capital multiplier for the capital calculation. The number of actual backtesting exceptions is dependent on current market performance relative to historic market volatility in addition to model performance and assumptions. This capital multiplier increases from a minimum of three to a maximum of four, depending on the number of exceptions. No backtesting exceptions occurred over the preceding 12 months. Backtesting is also performed at line of business levels within the Company.

Table 47 shows daily Total VaR (1-day, 99%) used for regulatory market risk capital backtesting for the 12 months ended December 31, 2017. The Company's average Total VaR for fourth quarter 2017 was $17 million with a low of $15 million and a high of $20 million.

Table 47: Daily Total 1-Day 99% VaR Measure (Rolling 12 Months)



Market Risk Governance The Board's Finance Committee has primary oversight over market risk-taking activities of the Company and reviews the acceptable market risk appetite. Our management-level Market Risk Committee, which reports to the Board's Finance Committee, is responsible for governance and oversight of market risk-taking activities across the Company as well as the establishment of market risk appetite and associated limits. The Corporate Market Risk Group, within Corporate Risk, administers and monitors compliance with the requirements established by the Market Risk Committee. The Corporate Market Risk Group has oversight responsibilities in identifying, measuring and monitoring the Company's market risk. The group is responsible for developing corporate market risk policy, creating quantitative market risk models, establishing independent risk limits, calculating and analyzing market risk capital, and reporting aggregated and line-of-business market risk information. Limits are regularly reviewed to ensure they remain relevant and within the market risk appetite for the Company. An automated limits-monitoring system enables a daily comprehensive review of multiple limits mandated across businesses. Limits are set with inner boundaries that will be periodically breached to promote an ongoing dialogue of risk exposure within the Company. Each line of business that exposes the Company to market risk has direct responsibility for managing market risk in accordance with defined risk tolerances and approved market risk mandates and hedging strategies. We measure and monitor market risk for both management and regulatory capital purposes.

Model Risk Management The market risk capital models are governed by our management-level Model Risk Committee policies and procedures, which include model validation. The purpose of model validation includes ensuring models are appropriate for their intended use and that appropriate controls exist to help mitigate the risk of invalid results. Model validation assesses the adequacy and appropriateness of the model, including reviewing its key components such as inputs, processing components, logic or theory, output results and supporting model documentation. Validation also includes ensuring significant unobservable model inputs are appropriate given observable market transactions or other market data within the same or similar asset classes. This ensures modeled approaches are appropriate given similar product valuation techniques and are in line with their intended purpose.

The Corporate Model Risk Group provides oversight of model validation and assessment processes. Corporate oversight responsibilities include evaluating the adequacy of business unit model risk management programs, maintaining company-wide model validation policies and standards, and reporting the results of these activities to management. In addition to the corporate-level review, all internal valuation models are subject to ongoing review by business-unit-level management.

MARKET RISK – EQUITY INVESTMENTS We are directly and indirectly affected by changes in the equity markets. We make and manage direct equity investments in start-up businesses, emerging growth companies, management buy-outs, acquisitions and corporate recapitalizations. We also invest in non-affiliated funds that make similar private equity investments. These private equity investments are made within capital allocations approved by management and the Board. The Board's policy is to review business developments, key risks and historical returns for the private equity investment portfolio at least annually. Management reviews these investments at least quarterly and assesses them for possible OTTI. For nonmarketable investments, the analysis is based on facts and circumstances of each individual investment and the expectations for that investment's cash flows and capital needs, the viability of its business model and our exit strategy. Nonmarketable investments include private equity investments accounted for under the cost method, equity method and fair value option.

In conjunction with the March 2008 initial public offering (IPO) of Visa, Inc. (Visa), we received approximately 20.7 million shares of Visa Class B common stock, the class which was apportioned to member banks of Visa at the time of the IPO. To manage our exposure to Visa and realize the value of the appreciated Visa shares, we incrementally sold these shares through a series of sales, thereby eliminating this position as of September 30, 2015. As part of these sales, we agreed to compensate the buyer for any additional contributions to a litigation settlement fund for the litigation matters associated with the Class B shares we sold. Our exposure to this retained litigation risk has been updated quarterly and is reflected on our balance sheet. For additional information about the associated litigation matters, see the "Interchange Litigation" section in Note 15 (Legal Actions) to Financial Statements in this Report as supplemented by Note 11 (Legal Actions) to Financial Statements in our 2018 Quarterly Reports on Form 10-Q.

As part of our business to support our customers, we trade public equities, listed/OTC equity derivatives and convertible bonds. We have parameters that govern these activities. We also have marketable equity securities in the available-for-sale securities portfolio, including securities relating to our venture capital activities. We manage these investments within capital risk limits approved by management and the Board and monitored by Corporate ALCO and the Market Risk Committee. Gains and losses on these securities are recognized in net income when realized and periodically include OTTI charges.

Changes in equity market prices may also indirectly affect our net income by (1) the value of third party assets under management and, hence, fee income, (2) borrowers whose ability to repay principal and/or interest may be affected by the stock market, or (3) brokerage activity, related commission income and other business activities. Each business line monitors and manages these indirect risks.

Table 48 provides information regarding our marketable and nonmarketable equity investments as of December 31, 2017 and 2016.

Table 48: Nonmarketable and Marketable Equity Investments

(in millions)		**Dec 31, 2017**	Dec 31, 2016
Nonmarketable equity investments:			
Cost method:			
Federal bank stock	**$**	**5,369**	6,407
Private equity		**1,394**	1,465
Auction rate securities		**400**	525
Total cost method		**7,163**	8,397
Equity method:			
LIHTC (1)		**10,269**	9,714
Private equity		**3,839**	3,635
Tax-advantaged renewable energy		**1,950**	2,054
New market tax credit and other		**294**	305
Total equity method		**16,352**	15,708
Fair value (2)		**4,867**	3,275
Total nonmarketable equity investments (3)	**$**	**28,382**	27,380
Marketable equity securities:			
Cost	**$**	**532**	706
Net unrealized gains		**146**	505
Total marketable equity securities (4)	**$**	**678**	1,211

(1) Represents low income housing tax credit (LIHTC) investments.
(2) Represents nonmarketable equity investments for which we have elected the fair value option. See Note 7 (Premises, Equipment, Lease Commitments and Other Assets) and Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report for additional information.
(3) Included in other assets on the balance sheet. See Note 7 (Premises, Equipment, Lease Commitments and Other Assets) to Financial Statements in this Report for additional information.
(4) Included in available-for-sale securities. See Note 5 (Investment Securities) to Financial Statements in this Report for additional information.

LIQUIDITY AND FUNDING The objective of effective liquidity management is to ensure that we can meet customer loan requests, customer deposit maturities/withdrawals and other cash commitments efficiently under both normal operating conditions and under periods of Wells Fargo-specific and/or market stress. To achieve this objective, the Board of Directors establishes liquidity guidelines that require sufficient asset-based liquidity to cover potential funding requirements and to avoid over-dependence on volatile, less reliable funding markets. These guidelines are monitored on a monthly basis by the Corporate ALCO and on a quarterly basis by the Board of Directors. These guidelines are established and monitored for both the consolidated company and for the Parent on a stand-alone basis to ensure that the Parent is a source of strength for its regulated, deposit-taking banking subsidiaries.

Liquidity Standards On September 3, 2014, the FRB, OCC and FDIC issued a final rule that implements a quantitative liquidity requirement consistent with the liquidity coverage ratio (LCR) established by the Basel Committee on Banking Supervision (BCBS). The rule requires banking institutions, such as Wells Fargo, to hold high-quality liquid assets (HQLA), such as central bank reserves and government and corporate debt that can be converted easily and quickly into cash, in an amount equal to or greater than its projected net cash outflows during a 30-day stress period. The rule is applicable to the Company on a consolidated basis and to our insured depository institutions with total assets greater than $10 billion. In addition, the FRB finalized rules imposing enhanced liquidity management standards on large bank holding companies (BHC) such as Wells Fargo, and has finalized a rule that requires large bank holding companies to publicly disclose on a quarterly basis certain quantitative and qualitative information regarding their LCR calculations.

The FRB, OCC and FDIC have proposed a rule that would implement a stable funding requirement, the net stable funding ratio (NSFR), which would require large banking organizations, such as Wells Fargo, to maintain a sufficient amount of stable funding in relation to their assets, derivative exposures and commitments over a one-year horizon period.

Liquidity Coverage Ratio As of December 31, 2017, the consolidated Company and Wells Fargo Bank, N.A. were above the minimum LCR requirement of 100%, which is calculated as HQLA divided by projected net cash outflows, as each is defined under the LCR rule. Table 49 presents the Company's quarterly average values for the daily-calculated LCR and its components calculated pursuant to the LCR rule requirements.

Table 49: Liquidity Coverage Ratio

(in millions)		Average for Quarter ended December 31, 2017
HQLA (1)(2)	$	393,103
Projected net cash outflows		317,274
LCR		124%
HQLA in excess of projected net cash outflows	$	75,829

(1) Excludes excess HQLA at Wells Fargo Bank, N.A.
(2) Net of applicable haircuts required under the LCR rule.

Liquidity Sources We maintain liquidity in the form of cash, cash equivalents and unencumbered high-quality, liquid securities. These assets make up our primary sources of liquidity which are presented in Table 50. Our primary sources of liquidity are substantially the same in composition as HQLA under the LCR rule; however, our primary sources of liquidity will generally exceed HQLA calculated under the LCR rule due to the applicable haircuts to HQLA and the exclusion of excess HQLA at our subsidiary insured depository institutions required under the LCR rule.

Our cash is predominantly on deposit with the Federal Reserve. Securities included as part of our primary sources of liquidity are comprised of U.S. Treasury and federal agency debt, and mortgage-backed securities issued by federal agencies within our investment securities portfolio. We believe these securities provide quick sources of liquidity through sales or by pledging to obtain financing, regardless of market conditions. Some of these securities are within the held-to-maturity portion of our investment securities portfolio and as such are not intended for sale but may be pledged to obtain financing. Some of the legal entities within our consolidated group of companies are subject to various regulatory, tax, legal and other restrictions that can limit the transferability of their funds. We believe we maintain adequate liquidity for these entities in consideration of such funds transfer restrictions.

Table 50: Primary Sources of Liquidity

	December 31, 2017			December 31, 2016		
(in millions)	**Total**	**Encumbered**	**Unencumbered**	Total	Encumbered	Unencumbered
Interest-earning deposits	**$ 192,580**	**—**	**192,580**	200,671	—	200,671
Securities of U.S. Treasury and federal agencies	**51,125**	**964**	**50,161**	70,898	1,160	69,738
Mortgage-backed securities of federal agencies (1)	**246,894**	**46,062**	**200,832**	205,655	52,672	152,983
Total	**$ 490,599**	**47,026**	**443,573**	477,224	53,832	423,392

(1) Included in encumbered securities at December 31, 2017, were securities with a fair value of $1.1 billion which were purchased in December 2017, but settled in January 2018.

In addition to our primary sources of liquidity shown in Table 50, liquidity is also available through the sale or financing of other securities including trading and/or available-for-sale securities, as well as through the sale, securitization or financing of loans, to the extent such securities and loans are not encumbered. In addition, other securities in our held-to-maturity portfolio, to the extent not encumbered, may be pledged to obtain financing.

Deposits have historically provided a sizeable source of relatively low-cost funds. At December 31, 2017, deposits were 140% of total loans compared with 135% at December 31, 2016.

Additional funding is provided by long-term debt and short-term borrowings. We access domestic and international capital markets for long-term funding (generally greater than one year) through issuances of registered debt securities, private placements and asset-backed secured funding.

Table 51 shows selected information for short-term borrowings, which generally mature in less than 30 days.

Table 51: Short-Term Borrowings

	Quarter ended				
(in millions)	**Dec 31, 2017**	Sep 30, 2017	Jun 30, 2017	Mar 31, 2017	Dec 31, 2016
Balance, period end					
Federal funds purchased and securities sold under agreements to repurchase	**$ 88,684**	79,824	78,683	76,366	78,124
Commercial paper	**—**	—	11	10	120
Other short-term borrowings	**14,572**	13,987	16,662	18,495	18,537
Total	**$ 103,256**	93,811	95,356	94,871	96,781
Average daily balance for period					
Federal funds purchased and securities sold under agreements to repurchase	**$ 88,197**	81,980	79,826	79,942	107,271
Commercial paper	**—**	4	10	51	121
Other short-term borrowings	**13,945**	17,209	15,927	18,556	17,306
Total	**$ 102,142**	99,193	95,763	98,549	124,698
Maximum month-end balance for period					
Federal funds purchased and securities sold under agreements to repurchase (1)	**$ 91,604**	83,260	78,683	81,284	109,645
Commercial paper (2)	**—**	11	11	78	121
Other short-term borrowings (3)	**14,948**	18,301	18,281	19,439	18,537

(1) Highest month-end balance in each of the last five quarters was in November, August, June and February 2017, and October 2016.
(2) There were no month-end balances in fourth quarter 2017; highest month-end balance in each of the previous four quarters was in July, June and January 2017, and November 2016.
(3) Highest month-end balance in each of the last five quarters was in November, July, April and February 2017, and December 2016.

Parent In February 2017, the Parent filed a registration statement with the SEC for the issuance of senior and subordinated notes, preferred stock and other securities. The Parent's ability to issue debt and other securities under this registration statement is limited by the debt issuance authority granted by the Board. As of December 31, 2017, the Parent was authorized by the Board to issue $50 billion in outstanding short-term debt and $180 billion in outstanding long-term debt. The Parent's short-term debt issuance authority granted by the Board was limited to debt issued to affiliates, and was revoked by the Board at management's request in January 2018. The Parent's long-term debt issuance authority granted by the Board includes debt issued to affiliates and others. At December 31, 2017, the Parent had available $50.0 billion in short-term debt issuance authority and $18.6 billion in long-term debt issuance authority. In 2017, the Parent issued $22.3 billion of senior notes, of which $16.4 billion were registered with the SEC.

The Parent's proceeds from securities issued were used for general corporate purposes, and, unless otherwise specified in the applicable prospectus or prospectus supplement, we expect the proceeds from securities issued in the future will be used for the same purposes. Depending on market conditions, we may purchase our outstanding debt securities from time to time in privately negotiated or open market transactions, by tender offer, or otherwise.

Wells Fargo Bank, N.A. As of December 31, 2017, Wells Fargo Bank, N.A. was authorized by its board of directors to issue $100 billion in outstanding short-term debt and $175 billion in outstanding long-term debt and had available $97.8 billion in short-term debt issuance authority and $113.0 billion in long-term debt issuance authority. In April 2015, Wells Fargo Bank, N.A. established a $100 billion bank note program under which, subject to any other debt outstanding under the limits described above, it may issue $50 billion in outstanding short-term senior notes and $50 billion in outstanding long-term senior or subordinated notes. At December 31, 2017, Wells Fargo Bank, N.A. had remaining issuance capacity under the bank note program of $50.0 billion in short-term senior notes and $38.0 billion in long-term senior or subordinated notes. In 2017, Wells Fargo Bank, N.A. issued $1.2 billion of unregistered senior notes, none of which were issued under the bank note program. In January 2018, Wells Fargo Bank, N.A. issued $6.0 billion of unregistered senior notes under the bank note program. In addition, during 2017, Wells Fargo Bank, N.A. executed advances of $21.9 billion with the Federal Home Loan Bank of Des Moines, and as of December 31, 2017, Wells Fargo Bank, N.A. had outstanding advances of $45.9 billion across the Federal Home Loan Bank System. In January 2018, Wells Fargo Bank, N.A. executed $10.5 billion of Federal Home Loan Bank advances.

Credit Ratings Investors in the long-term capital markets, as well as other market participants, generally will consider, among other factors, a company's debt rating in making investment decisions. Rating agencies base their ratings on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix, the level and quality of earnings, and rating agency assumptions regarding the probability and extent of federal financial assistance or support for certain large financial institutions. Adverse changes in these factors could result in a reduction of our credit rating; however, our debt securities do not contain credit rating covenants.

On October 3, 2017, Fitch Ratings, Inc. downgraded certain of the Company's ratings by one notch and revised the ratings outlook from negative to stable. On February 6, 2018, Moody's affirmed the Company's ratings and revised the ratings outlook from stable to negative. On February 7, 2018, S&P Global Ratings downgraded the Company's ratings by one notch and revised the ratings outlook from negative to stable. Both the Parent and Wells Fargo Bank, N.A. remain among the top-rated financial firms in the U.S.

See the "Risk Factors" section in this Report for additional information regarding our credit ratings and the potential impact a credit rating downgrade would have on our liquidity and operations, as well as Note 16 (Derivatives) to Financial Statements in this Report for information regarding additional collateral and funding obligations required for certain derivative instruments in the event our credit ratings were to fall below investment grade.

The current credit ratings of the Parent and Wells Fargo Bank, N.A. are presented in Table 52.

Table 52: Credit Ratings

	Wells Fargo & Company		Wells Fargo Bank, N.A.	
	Senior debt	Short-term borrowings	Long-term deposits	Short-term borrowings
Moody's	A2	P-1	Aa1	P-1
S&P	A-	A-2	A+	A-1
Fitch Ratings, Inc.	A+	F1	AA	F1+
DBRS	AA (low)	R-1 (middle)	AA	R-1 (high)

FEDERAL HOME LOAN BANK MEMBERSHIP The Federal Home Loan Banks (the FHLBs) are a group of cooperatives that lending institutions use to finance housing and economic development in local communities. We are a member of the FHLBs based in Dallas, Des Moines and San Francisco. Each member of the FHLBs is required to maintain a minimum investment in capital stock of the applicable FHLB. The board of directors of each FHLB can increase the minimum investment requirements in the event it has concluded that additional capital is required to allow it to meet its own regulatory capital requirements. Any increase in the minimum investment requirements outside of specified ranges requires the approval of the Federal Housing Finance Board. Because the extent of any obligation to increase our investment in any of the FHLBs depends entirely upon the occurrence of a future event, potential future payments to the FHLBs are not determinable.

Capital Management

We have an active program for managing capital through a comprehensive process for assessing the Company's overall capital adequacy. Our objective is to maintain capital at an amount commensurate with our risk profile and risk tolerance objectives, and to meet both regulatory and market expectations. We primarily fund our capital needs through the retention of earnings net of both dividends and share repurchases, as well as through the issuance of preferred stock and long and short-term debt. Retained earnings increased $12.2 billion from December 31, 2016, predominantly from Wells Fargo net income of $22.2 billion, less common and preferred stock dividends of $9.3 billion. During 2017, we issued 72.0 million shares of common stock. In April 2017, we issued 27.6 million Depositary Shares, each representing a 1/1000th interest in a share of Non-Cumulative Perpetual Class A Preferred Stock, Series Y, for an aggregate public offering price of $690 million. During 2017, we repurchased 196.5 million shares of common stock in open market transactions, private transactions and from employee benefit plans, at a cost of $10.7 billion. We entered into a $1 billion forward repurchase contract with an unrelated third party in January 2018 that settled in February 2018 for 15.7 million shares. We also entered into a $600 million forward repurchase contract with an unrelated third party in February 2018 that is expected to settle in second quarter 2018 for approximately 11 million shares. For additional information about our forward repurchase agreements, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Regulatory Capital Guidelines

The Company and each of our insured depository institutions are subject to various regulatory capital adequacy requirements administered by the FRB and the OCC. Risk-based capital (RBC) guidelines establish a risk-adjusted ratio relating capital to different categories of assets and off-balance sheet exposures as discussed below.

RISK-BASED CAPITAL AND RISK-WEIGHTED ASSETS The Company is subject to final and interim final rules issued by federal banking regulators to implement Basel III capital requirements for U.S. banking organizations. These rules are based on international guidelines for determining regulatory capital issued by the Basel Committee on Banking Supervision (BCBS). The federal banking regulators' capital rules, among other things, require on a fully phased-in basis:

- a minimum Common Equity Tier 1 (CET1) ratio of 9.0%, comprised of a 4.5% minimum requirement plus a capital conservation buffer of 2.5% and for us, as a global systemically important bank (G-SIB), a capital surcharge to be calculated annually, which is 2.0% based on our year-end 2016 data;
- a minimum tier 1 capital ratio of 10.5%, comprised of a 6.0% minimum requirement plus the capital conservation buffer of 2.5% and the G-SIB capital surcharge of 2.0%;
- a minimum total capital ratio of 12.5%, comprised of a 8.0% minimum requirement plus the capital conservation buffer of 2.5% and the G-SIB capital surcharge of 2.0%;
- a potential countercyclical buffer of up to 2.5% to be added to the minimum capital ratios, which is currently not in effect but could be imposed by regulators at their discretion if it is determined that a period of excessive credit growth is contributing to an increase in systemic risk;
- a minimum tier 1 leverage ratio of 4.0%; and
- a minimum supplementary leverage ratio (SLR) of 5.0% (comprised of a 3.0% minimum requirement plus a supplementary leverage buffer of 2.0%) for large and internationally active bank holding companies (BHCs).

We were required to comply with the final Basel III capital rules beginning January 2014, with certain provisions subject to phase-in periods. The Basel III capital rules are scheduled to be fully phased in by the end of 2021. The

Basel III capital rules contain two frameworks for calculating capital requirements, a Standardized Approach, which replaced Basel I, and an Advanced Approach applicable to certain institutions, including Wells Fargo. Accordingly, in the assessment of our capital adequacy, we must report the lower of our CET1, tier 1 and total capital ratios calculated under the Standardized Approach and under the Advanced Approach.

Because the Company has been designated as a G-SIB, we will also be subject to the FRB's rule implementing the additional capital surcharge of between 1.0-4.5% on G-SIBs. Under the rule, we must annually calculate our surcharge under two methods and use the higher of the two surcharges. The first method (method one) will consider our size, interconnectedness, cross-jurisdictional activity, substitutability, and complexity, consistent with a methodology developed by the BCBS and the Financial Stability Board (FSB). The second (method two) will use similar inputs, but will replace substitutability with use of short-term wholesale funding and will generally result in higher surcharges than the BCBS methodology. The phase-in period for the G-SIB surcharge began on January 1, 2016 and will become fully effective on January 1, 2019. Based on year-end 2016 data, our 2018 G-SIB surcharge under method two is 2.0% of the Company's RWAs, which is the higher of method one and method two. Because the G-SIB surcharge is calculated annually based on data that can differ over time, the amount of the surcharge is subject to change in future years. Under the Standardized Approach (fully phased-in), our CET1 ratio of 11.98% exceeded the minimum of 9.0% by 298 basis points at December 31, 2017.

The tables that follow provide information about our risk-based capital and related ratios as calculated under Basel III capital guidelines. For banking industry regulatory reporting purposes, we report our capital in accordance with Transition Requirements but are managing our capital based on a fully phased-in calculation. For information about our capital requirements calculated in accordance with Transition Requirements, see Note 27 (Regulatory and Agency Capital Requirements) to Financial Statements in this Report.

Table 53 summarizes our CET1, tier 1 capital, total capital, risk-weighted assets and capital ratios on a fully phased-in basis at December 31, 2017 and December 31, 2016. As of December 31, 2017, our CET1, tier 1, and total capital ratios were lower using RWAs calculated under the Standardized Approach.

Table 53: Capital Components and Ratios (Fully Phased-In) (1)

		December 31, 2017			December 31, 2016		
(in millions, except ratios)		**Advanced Approach**	**Standardized Approach**		Advanced Approach		Standardized Approach
Common Equity Tier 1	(A)	**$ 154,022**	**154,022**		146,424		146,424
Tier 1 Capital	(B)	**177,466**	**177,466**		169,063		169,063
Total Capital	(C)	**208,395**	**218,159**		200,344		210,796
Risk-Weighted Assets	(D)	**1,225,939**	**1,285,563**		1,298,688		1,358,933
Common Equity Tier 1 Capital Ratio	(A)/(D)	**12.56%**	**11.98**	*	11.27		10.77 *
Tier 1 Capital Ratio	(B)/(D)	**14.48**	**13.80**	*	13.02		12.44 *
Total Capital Ratio	(C)/(D)	**17.00**	**16.97**	*	15.43	*	15.51

*Denotes the lowest capital ratio as determined under the Advanced and Standardized Approaches.

(1) Fully phased-in regulatory capital amounts, ratios and RWAs are considered non-GAAP financial measures that are used by management, bank regulatory agencies, investors and analysts to assess and monitor the Company's capital position. See Table 54 for information regarding the calculation and components of CET1, tier 1 capital, total capital and RWAs, as well as the corresponding reconciliation of our regulatory capital amounts to GAAP financial measures.

Table 54 provides information regarding the calculation and composition of our risk-based capital under the Advanced and Standardized Approaches at December 31, 2017 and December 31, 2016.

Table 54: Risk-Based Capital Calculation and Components

(in millions)			December 31, 2017 Advanced Approach	December 31, 2017 Standardized Approach	December 31, 2016 Advanced Approach	December 31, 2016 Standardized Approach
Total equity		$	**208,079**	**208,079**	200,497	200,497
Adjustments:						
Preferred stock			**(25,358)**	**(25,358)**	(24,551)	(24,551)
Additional paid-in capital on ESOP preferred stock			**(122)**	**(122)**	(126)	(126)
Unearned ESOP shares			**1,678**	**1,678**	1,565	1,565
Noncontrolling interests			**(1,143)**	**(1,143)**	(916)	(916)
Total common stockholders' equity			**183,134**	**183,134**	176,469	176,469
Adjustments:						
Goodwill			**(26,587)**	**(26,587)**	(26,693)	(26,693)
Certain identifiable intangible assets (other than MSRs)			**(1,624)**	**(1,624)**	(2,723)	(2,723)
Other assets (1)			**(2,155)**	**(2,155)**	(2,088)	(2,088)
Applicable deferred taxes (2)			**962**	**962**	1,772	1,772
Investment in certain subsidiaries and other			**292**	**292**	(313)	(313)
Common Equity Tier 1 (Fully Phased-In)			**154,022**	**154,022**	146,424	146,424
Effect of Transition Requirements			**743**	**743**	2,361	2,361
Common Equity Tier 1 (Transition Requirements)		$	**154,765**	**154,765**	148,785	148,785
Common Equity Tier 1 (Fully Phased-In)		$	**154,022**	**154,022**	146,424	146,424
Preferred stock			**25,358**	**25,358**	24,551	24,551
Additional paid-in capital on ESOP preferred stock			**122**	**122**	126	126
Unearned ESOP shares			**(1,678)**	**(1,678)**	(1,565)	(1,565)
Other			**(358)**	**(358)**	(473)	(473)
Total Tier 1 capital (Fully Phased-In)	(A)		**177,466**	**177,466**	169,063	169,063
Effect of Transition Requirements			**743**	**743**	2,301	2,301
Total Tier 1 capital (Transition Requirements)		$	**178,209**	**178,209**	171,364	171,364
Total Tier 1 capital (Fully Phased-In)		$	**177,466**	**177,466**	169,063	169,063
Long-term debt and other instruments qualifying as Tier 2			**28,994**	**28,994**	29,465	29,465
Qualifying allowance for credit losses (3)			**2,196**	**11,960**	2,088	12,540
Other			**(261)**	**(261)**	(272)	(272)
Total Tier 2 capital (Fully Phased-In)	(B)		**30,929**	**40,693**	31,281	41,733
Effect of Transition Requirements			**1,195**	**1,195**	1,780	1,780
Total Tier 2 capital (Transition Requirements)		$	**32,124**	**41,888**	33,061	43,513
Total qualifying capital (Fully Phased-In)	(A)+(B)	$	**208,395**	**218,159**	200,344	210,796
Total Effect of Transition Requirements			**1,938**	**1,938**	4,081	4,081
Total qualifying capital (Transition Requirements)		$	**210,333**	**220,097**	204,425	214,877
Risk-Weighted Assets (RWAs) (4)(5):						
Credit risk		$	**890,171**	**1,249,395**	960,763	1,314,833
Market risk			**36,168**	**36,168**	44,100	44,100
Operational risk			**299,600**	**N/A**	293,825	N/A
Total RWAs (Fully Phased-In)		$	**1,225,939**	**1,285,563**	1,298,688	1,358,933
Credit risk		$	**863,777**	**1,224,495**	936,664	1,292,098
Market risk			**36,168**	**36,168**	44,100	44,100
Operational risk			**299,600**	**N/A**	293,825	N/A
Total RWAs (Transition Requirements)		$	**1,199,545**	**1,260,663**	1,274,589	1,336,198

(1) Represents goodwill and other intangibles on nonmarketable equity investments and on held-for-sale assets, which are included in other assets.
(2) Applicable deferred taxes relate to goodwill and other intangible assets. They were determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.
(3) Under the Advanced Approach the allowance for credit losses that exceeds expected credit losses is eligible for inclusion in Tier 2 Capital, to the extent the excess allowance does not exceed 0.6% of Advanced credit RWAs, and under the Standardized Approach, the allowance for credit losses is includable in Tier 2 Capital up to 1.25% of Standardized credit RWAs, with any excess allowance for credit losses being deducted from total RWAs.
(4) RWAs calculated under the Advanced Approach utilize a risk-sensitive methodology, which relies upon the use of internal credit models based upon our experience with internal rating grades. Advanced Approach also includes an operational risk component, which reflects the risk of operating loss resulting from inadequate or failed internal processes or systems.
(5) Under the regulatory guidelines for risk-based capital, on-balance sheet assets and credit equivalent amounts of derivatives and off-balance sheet items are assigned to one of several broad risk categories according to the obligor, or, if relevant, the guarantor or the nature of any collateral. The aggregate dollar amount in each risk category is then multiplied by the risk weight associated with that category. The resulting weighted values from each of the risk categories are aggregated for determining total RWAs.

Table 55 presents the changes in Common Equity Tier 1 under the Advanced Approach for the year ended December 31, 2017.

Table 55: Analysis of Changes in Common Equity Tier 1

(in millions)		
Common Equity Tier 1 (Fully Phased-In) at December 31, 2016	$	146,424
Net income applicable to common stock		20,554
Common stock dividends		(7,658)
Common stock issued, repurchased, and stock compensation-related items		(6,836)
Goodwill		105
Certain identifiable intangible assets (other than MSRs)		1,100
Other assets (1)		(68)
Applicable deferred taxes (2)		(810)
Investment in certain subsidiaries and other		1,211
Change in Common Equity Tier 1		7,598
Common Equity Tier 1 (Fully Phased-In) at December 31, 2017	$	154,022

(1) Represents goodwill and other intangibles on nonmarketable equity investments and on held-for-sale assets, which are included in other assets.
(2) Applicable deferred taxes relate to goodwill and other intangible assets. They were determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.

Table 56 presents net changes in the components of RWAs under the Advanced and Standardized Approaches for the year ended December 31, 2017.

Table 56: Analysis of Changes in RWAs

(in millions)		Advanced Approach	Standardized Approach
RWAs (Fully Phased-In) at December 31, 2016	$	1,298,688	1,358,933
Net change in credit risk RWAs		(70,592)	(65,438)
Net change in market risk RWAs		(7,932)	(7,932)
Net change in operational risk RWAs		5,775	N/A
Total change in RWAs		(72,749)	(73,370)
RWAs (Fully Phased-In) at December 31, 2017		1,225,939	1,285,563
Effect of Transition Requirements		(26,394)	(24,900)
RWAs (Transition Requirements) at December 31, 2017	$	1,199,545	1,260,663

TANGIBLE COMMON EQUITY We also evaluate our business based on certain ratios that utilize tangible common equity. Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, and goodwill and certain identifiable intangible assets (including goodwill and intangible assets associated with certain of our nonmarketable equity investments but excluding mortgage servicing rights), net of applicable deferred taxes. These tangible common equity ratios are as follows:

- Tangible book value per common share, which represents tangible common equity divided by common shares outstanding.
- Return on average tangible common equity (ROTCE), which represents our annualized earnings contribution as a percentage of tangible common equity.

The methodology of determining tangible common equity may differ among companies. Management believes that tangible book value per common share and return on average tangible common equity, which utilize tangible common equity, are useful financial measures because they enable investors and others to assess the Company's use of equity.

Table 57 provides a reconciliation of these non-GAAP financial measures to GAAP financial measures.

Table 57: Tangible Common Equity

		Balance at period end			Average balance for the year ended		
(in millions, except ratios)		**Dec 31, 2017**	Dec 31, 2016	Dec 31, 2015	**Dec 31, 2017**	Dec 31, 2016	Dec 31, 2015
Total equity		**$ 208,079**	200,497	193,891	**205,654**	200,690	191,584
Adjustments:							
Preferred stock		**(25,358)**	(24,551)	(22,214)	**(25,592)**	(24,363)	(21,715)
Additional paid-in capital on ESOP preferred stock		**(122)**	(126)	(110)	**(139)**	(161)	(138)
Unearned ESOP shares		**1,678**	1,565	1,362	**2,143**	2,011	1,716
Noncontrolling interests		**(1,143)**	(916)	(893)	**(948)**	(936)	(1,048)
Total common stockholders' equity	(A)	**183,134**	176,469	172,036	**181,118**	177,241	170,399
Adjustments:							
Goodwill		**(26,587)**	(26,693)	(25,529)	**(26,629)**	(26,700)	(25,673)
Certain identifiable intangible assets (other than MSRs)		**(1,624)**	(2,723)	(3,167)	**(2,176)**	(3,254)	(3,793)
Other assets (1)		**(2,155)**	(2,088)	(2,074)	**(2,184)**	(2,117)	(1,654)
Applicable deferred taxes (2)		**962**	1,772	2,071	**1,570**	1,897	2,248
Tangible common equity	(B)	**$ 153,730**	146,737	143,337	**151,699**	147,067	141,527
Common shares outstanding	(C)	**4,891.6**	5,016.1	5,092.1	**N/A**	N/A	N/A
Net income applicable to common stock	(D)	**N/A**	N/A	N/A	**$ 20,554**	20,373	21,470
Book value per common share	(A)/(C)	**$ 37.44**	35.18	33.78	**N/A**	N/A	N/A
Tangible book value per common share	(B)/(C)	**31.43**	29.25	28.15	**N/A**	N/A	N/A
Return on average common stockholders' equity (ROE)	(D)/(A)	**N/A**	N/A	N/A	**11.35 %**	11.49	12.60
Return on average tangible common equity (ROTCE)	(D)/(B)	**N/A**	N/A	N/A	**13.55**	13.85	15.17

(1) Represents goodwill and other intangibles on nonmarketable equity investments and on held-for-sale assets, which are included in other assets.
(2) Applicable deferred taxes relate to goodwill and other intangible assets. They were determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.

SUPPLEMENTARY LEVERAGE RATIO In April 2014, federal banking regulators finalized a rule that enhances the SLR requirements for BHCs, like Wells Fargo, and their insured depository institutions. The SLR consists of Tier 1 capital divided by the Company's total leverage exposure. Total leverage exposure consists of the total average on-balance sheet assets, plus off-balance sheet exposures, such as undrawn commitments and derivative exposures, less amounts permitted to be deducted from Tier 1 capital. The rule, which became effective on January 1, 2018, requires a covered BHC to maintain a SLR of at least 5.0% (comprised of the 3.0% minimum requirement plus a supplementary leverage buffer of 2.0%) to avoid restrictions on capital distributions and discretionary bonus payments. The rule also requires that all of our insured depository institutions maintain a SLR of 6.0% under applicable regulatory capital adequacy guidelines. In September 2014, federal banking regulators finalized additional changes to the SLR requirements to implement revisions to the Basel III leverage framework finalized by the BCBS in January 2014. These additional changes, among other things, modify the methodology for including off- balance sheet items, including credit derivatives, repo-style transactions and lines of credit, in the denominator of the SLR. At December 31, 2017, our SLR for the Company was 8.0% assuming full phase-in of the Advanced Approach capital framework. Based on our review, our current leverage levels would exceed the applicable requirements for each of our insured depository institutions as well. The fully phased-in SLR is considered a non-GAAP financial measure that is used by management, bank regulatory agencies, investors and analysts to assess and monitor the Company's leverage exposure. See Table 58 for information regarding the calculation and components of the SLR.

Table 58: Fully Phased-In SLR

(in millions, except ratio)		Three months ended December 31, 2017
Tier 1 capital	$	177,466
Total average assets		1,935,318
Less: deductions from Tier 1 capital (1)		29,918
Total adjusted average assets		1,905,400
Adjustments:		
Derivative exposures (2)		73,359
Repo-style transactions (3)		3,382
Other off-balance sheet exposures (4)		243,221
Total adjustments		319,962
Total leverage exposure	$	2,225,362
Supplementary leverage ratio		8.0%

(1) Amounts permitted to be deducted from Tier 1 capital primarily include goodwill and other intangible assets, net of associated deferred tax liabilities.
(2) Represents adjustments for off balance sheet derivative exposures, and derivative collateral netting as defined for supplementary leverage ratio determination purposes.
(3) Adjustments for repo-style transactions represent counterparty credit risk for all repo-style transactions where Wells Fargo & Company is the principal (i.e., principal counterparty facing the client).
(4) Adjustments for other off-balance sheet exposures represent the notional amounts of all off-balance sheet exposures (excluding off balance sheet exposures associated with derivative and repo-style transactions) less the adjustments for conversion to credit equivalent amounts under the regulatory capital rule.

OTHER REGULATORY CAPITAL MATTERS In December 2016, the FRB finalized rules to address the amount of equity and unsecured long-term debt a U.S. G-SIB must hold to improve its resolvability and resiliency, often referred to as Total Loss Absorbing Capacity (TLAC). Under the rules, which become effective on January 1, 2019, U.S. G-SIBs will be required to have a minimum TLAC amount (consisting of CET1 capital and additional tier 1 capital issued directly by the top-tier or covered BHC plus eligible external long-term debt) equal to the greater of (i) 18% of RWAs and (ii) 7.5% of total leverage exposure (the denominator of the SLR calculation). Additionally, U.S. G-SIBs will be required to maintain (i) a TLAC buffer equal to 2.5% of RWAs plus the firm's applicable G-SIB capital surcharge calculated under method one plus any applicable countercyclical buffer that will be added to the 18% minimum and (ii) an external TLAC leverage buffer equal to 2.0% of total leverage exposure that will be added to the 7.5% minimum, in order to avoid restrictions on capital distributions and discretionary bonus payments. The rules will also require U.S. G-SIBs to have a minimum amount of eligible unsecured long-term debt equal to the greater of (i) 6.0% of RWAs plus the firm's applicable G-SIB capital surcharge calculated under method two and (ii) 4.5% of the total leverage exposure. In addition, the rules will impose certain restrictions on the operations and liabilities of the top-tier or covered BHC in order to further facilitate an orderly resolution, including prohibitions on the issuance of short-term debt to external investors and on entering into derivatives and certain other types of financial contracts with external counterparties. While the rules permit permanent grandfathering of a significant portion of otherwise ineligible long-term debt that was issued prior to December 31, 2016, long-term debt issued after that date must be fully compliant with the eligibility requirements of the rules in order to count toward the minimum TLAC amount. As a result of the rules, we will need to issue additional long-term debt to remain compliant with the requirements. As of December 31, 2017, we estimate that our eligible external TLAC as a percentage of total risk-weighted assets was 24.1% compared with an expected January 1, 2019 required minimum of 22.0%.

In addition, as discussed in the "Risk Management – Asset/ Liability Management – Liquidity and Funding – Liquidity Standards" section in this Report, federal banking regulators have issued a final rule regarding the U.S. implementation of the Basel III LCR and a proposed rule regarding the NSFR.

Capital Planning and Stress Testing

Our planned long-term capital structure is designed to meet regulatory and market expectations. We believe that our long-term targeted capital structure enables us to invest in and grow our business, satisfy our customers' financial needs in varying environments, access markets, and maintain flexibility to return capital to our shareholders. Our long-term targeted capital structure also considers capital levels sufficient to exceed capital requirements including the G-SIB surcharge. Accordingly, based on the final Basel III capital rules under the lower of the Standardized or Advanced Approaches CET1 capital ratios, we currently target a long-term CET1 capital ratio at or in excess of 10%, which includes a 2% G-SIB surcharge. Our capital targets are subject to change based on various factors, including changes to the regulatory capital framework and expectations for large banks promulgated by bank regulatory agencies, planned capital actions, changes in our risk profile and other factors.

Under the FRB's capital plan rule, large BHCs are required to submit capital plans annually for review to determine if the FRB has any objections before making any capital distributions. The rule requires updates to capital plans in the event of material changes in a BHC's risk profile, including as a result of any significant acquisitions. The FRB assesses the overall financial condition, risk profile, and capital adequacy of BHCs while considering both quantitative and qualitative factors when evaluating capital plans.

Our 2017 capital plan, which was submitted on April 4, 2017, as part of CCAR, included a comprehensive capital outlook supported by an assessment of expected sources and uses of capital over a given planning horizon under a range of expected and stress scenarios. As part of the 2017 CCAR, the FRB also generated a supervisory stress test, which assumed a sharp decline in the economy and significant decline in asset pricing using the information provided by the Company to estimate performance. The FRB reviewed the supervisory stress results both as required under the Dodd-Frank Act using a common set of capital actions for all large BHCs and by taking into account the Company's proposed capital actions. The FRB published its supervisory stress test results as required under the Dodd-Frank Act on June 22, 2017. On June 28, 2017, the FRB notified us that it did not object to our capital plan included in the 2017 CCAR.

Federal banking regulators require stress tests to evaluate whether an institution has sufficient capital to continue to operate during periods of adverse economic and financial conditions. These stress testing requirements set forth the timing and type of stress test activities large BHCs and banks must undertake as well as rules governing stress testing controls, oversight and disclosure requirements. The rules also limit a large BHC's ability to make capital distributions to the extent its actual capital issuances were less than amounts indicated in its capital plan. As required under the FRB's stress testing rule, we must submit a mid-cycle stress test based on second quarter data and scenarios developed by the Company. We submitted the results of the mid-cycle stress test to the FRB and disclosed a summary of the results in October 2017.

Securities Repurchases

From time to time the Board authorizes the Company to repurchase shares of our common stock. Although we announce when the Board authorizes share repurchases, we typically do not give any public notice before we repurchase our shares. Future stock repurchases may be private or open-market repurchases, including block transactions, accelerated or delayed block transactions, forward transactions, and similar transactions. Additionally, we may enter into plans to purchase stock that satisfy the conditions of Rule 10b5-1 of the Securities Exchange Act of 1934. Various factors determine the amount and timing of our share repurchases, including our capital requirements, the number of shares we expect to issue for employee benefit plans and acquisitions, market conditions (including the trading price of our stock), and regulatory and legal considerations, including the FRB's response to our capital plan and to changes in our risk profile.

In January 2016, the Board authorized the repurchase of 350 million shares of our common stock. At December 31, 2017, we had remaining authority to repurchase approximately 71 million shares, subject to regulatory and legal conditions. In January 2018, the Board authorized the repurchase of an additional 350 million shares of our common stock. For more information about share repurchases during fourth quarter 2017, see Part II, Item 5 in our 2017 Form 10-K.

Historically, our policy has been to repurchase shares under the "safe harbor" conditions of Rule 10b-18 of the Securities Exchange Act of 1934 including a limitation on the daily volume of repurchases. Rule 10b-18 imposes an additional daily volume limitation on share repurchases during a pending merger or acquisition in which shares of our stock will constitute some or all of the consideration. Our management may determine that during a pending stock merger or acquisition when the safe harbor would otherwise be available, it is in our best interest to repurchase shares in excess of this additional daily volume limitation. In such cases, we intend to repurchase shares in compliance with the other conditions of the safe harbor, including the standing daily volume limitation that applies whether or not there is a pending stock merger or acquisition.

In connection with our participation in the Capital Purchase Program (CPP), a part of the Troubled Asset Relief Program (TARP), we issued to the U.S. Treasury Department warrants to purchase 110,261,688 shares of our common stock with an original exercise price of $34.01 per share expiring on October 28, 2018. The terms of the warrants require the exercise price to be adjusted under certain circumstances when the Company's quarterly common stock dividend exceeds $0.34 per share, which began occurring in second quarter 2014. Accordingly, with each quarterly common stock dividend above $0.34 per share, we must calculate whether an adjustment to the exercise price is required by the terms of the warrants, including whether certain minimum thresholds have been met to trigger an adjustment, and notify the holders of any such change. The Board authorized the repurchase by the Company of up to $1 billion of the warrants. At December 31, 2017, there were 23,327,854 warrants outstanding, exercisable at $33.701 per share, and $452 million of unused warrant repurchase authority. Depending on market conditions, we may purchase from time to time additional warrants in privately negotiated or open market transactions, by tender offer or otherwise.

Regulatory Matters

Since the enactment of the Dodd-Frank Act in 2010, the U.S. financial services industry has been subject to a significant increase in regulation and regulatory oversight initiatives. This increased regulation and oversight has substantially changed how most U.S. financial services companies conduct business and has increased their regulatory compliance costs. The following highlights the more significant regulations and regulatory oversight initiatives that have affected or may affect our business. For additional information about the regulatory matters discussed below and other regulations and regulatory oversight matters, see Part I, Item 1 "Regulation and Supervision" of our 2017 Form 10-K, and the "Capital Management," "Forward-Looking Statements" and "Risk Factors" sections and Note 27 (Regulatory and Agency Capital Requirements) to Financial Statements in this Report.

Dodd-Frank Act

The Dodd-Frank Act is the most significant financial reform legislation since the 1930s and is driving much of the current U.S. regulatory reform efforts. The Dodd-Frank Act and many of its provisions became effective in July 2010 and July 2011. The following provides additional information on the Dodd-Frank Act, including the current status of certain of its rulemaking initiatives.

- *Enhanced supervision and regulation of systemically important firms.* The Dodd-Frank Act grants broad authority to federal banking regulators to establish enhanced supervisory and regulatory requirements for systemically important firms. The FRB has finalized a number of regulations implementing enhanced prudential requirements for large bank holding companies (BHCs) like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, and imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. The FRB has also re-proposed, but not yet finalized, additional enhanced prudential standards that would implement single counterparty credit limits and establish remediation requirements for large BHCs experiencing financial distress. Similarly, the FRB has proposed additional requirements regarding effective risk management practices at large BHCs, including its expectations for boards of directors and senior management. In addition to the authorization of enhanced supervisory and regulatory requirements for systemically important firms, the Dodd-Frank Act also established the Financial Stability Oversight Council and the Office of Financial Research, which may recommend new systemic risk management requirements and require new reporting of systemic risks. The OCC, under separate authority, has also finalized guidelines establishing heightened governance and risk management standards for large national banks such as Wells Fargo Bank, N.A. The OCC guidelines require covered banks to establish and adhere to a written risk governance framework in order to manage and control their risk-taking activities. The guidelines also formalize roles and responsibilities for risk management practices within covered banks and create certain risk oversight responsibilities for their boards of directors.

- *Regulation of consumer financial products.* The Dodd-Frank Act established the Consumer Financial Protection Bureau (CFPB) to ensure consumers receive clear and accurate disclosures regarding financial products and to protect them from hidden fees and unfair or abusive practices. With respect to residential mortgage lending, the CFPB issued a number of final rules implementing new origination, notification, disclosure and other requirements, as well as additional limitations on the fees and charges that may be increased from the estimates provided by lenders. The CFPB finalized amendments to the rule implementing the Home Mortgage Disclosure Act, resulting in a significant expansion of the data points lenders are required to collect beginning January 1, 2018 and report to the CFPB beginning January 1, 2019. The CFPB also expanded the transactions covered by the rule and increased the reporting frequency from annual to quarterly for large volume lenders, such as Wells Fargo, beginning January 1, 2020. With respect to other financial products, the CFPB finalized rules, most of which become effective on April 1, 2019, to make prepaid cards subject to similar consumer protections as those provided by more traditional debit and credit cards such as fraud protection and expanded access to account information.

  In addition to these rulemaking activities, the CFPB is continuing its on-going supervisory examination activities of the financial services industry with respect to a number of consumer businesses and products, including mortgage lending and servicing, fair lending requirements, student lending activities, and automobile finance. At this time, the Company cannot predict the full impact of the CFPB's rulemaking and supervisory authority on our business practices or financial results.
- *Volcker Rule.* The Volcker Rule, with limited exceptions, prohibits banking entities from engaging in proprietary trading or owning any interest in or sponsoring or having certain relationships with a hedge fund, a private equity fund or certain structured transactions that are deemed covered funds. Federal banking regulators, the SEC and CFTC (collectively, the Volcker supervisory regulators) jointly released a final rule to implement the Volcker Rule's restrictions. As a banking entity with more than $50 billion in consolidated assets, we are also subject to enhanced compliance program requirements.
- *Regulation of swaps and other derivatives activities.* The Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives and authorized the CFTC and the SEC to regulate swaps and security-based swaps, respectively. The CFTC has adopted rules applicable to our provisionally registered swap dealer, Wells Fargo Bank, N.A., that require, among other things, extensive regulatory and public reporting of swaps, central clearing and trading of swaps on exchanges or other multilateral platforms, and compliance with comprehensive internal and external business conduct standards. The SEC is expected to implement parallel rules applicable to security-based swaps. In addition, federal regulators have adopted final rules establishing margin requirements for swaps and security-based swaps not centrally cleared. All of these new rules, as well as others being considered by regulators in other jurisdictions, may negatively impact customer demand for over-the-counter derivatives and may increase our costs for engaging in swaps and other derivatives activities.
- *Changes to asset-backed securities (ABS) markets.* The Dodd-Frank Act requires sponsors of certain ABS to hold at least a 5% ownership stake in the ABS. Federal regulatory agencies have issued final rules to implement this credit risk retention requirement, which included an exemption for, among other things, GSE mortgage backed securities. The final rules may impact our ability to issue certain asset-backed securities or otherwise participate in various securitization transactions.
- *Regulation of interchange transaction fees (the Durbin Amendment).* On October 1, 2011, the FRB rule enacted to implement the Durbin Amendment to the Dodd-Frank Act that limits debit card interchange transaction fees to those reasonable and proportional to the cost of the transaction became effective. The rule generally established that the maximum allowable interchange fee that an issuer may receive or charge for an electronic debit transaction is the sum of 21 cents per transaction and 5 basis points multiplied by the value of the transaction. On July 31, 2013, the U.S. District Court for the District of Columbia ruled that the approach used by the FRB in setting the maximum allowable interchange transaction fee impermissibly included costs that were specifically excluded from consideration under the Durbin Amendment. In August 2013, the FRB filed a notice of appeal of the decision to the United States Court of Appeals for the District of Columbia. In March 2014, the Court of Appeals reversed the District Court's decision, but did direct the FRB to provide further explanation regarding its treatment of the costs of monitoring transactions. The plaintiffs did not file a petition for rehearing with the Court of Appeals but filed a petition for writ of certiorari with the U.S. Supreme Court. In

January 2015, the U.S. Supreme Court denied the petition for writ of certiorari.

Regulatory Capital Guidelines and Capital Plans
During 2013, federal banking regulators issued final rules that substantially amended the risk-based capital rules for banking organizations. The rules implement the Basel III regulatory capital reforms in the U.S., comply with changes required by the Dodd-Frank Act, and replace the existing Basel I-based capital requirements. We were required to begin complying with the rules on January 1, 2014, subject to phase-in periods that are scheduled to be fully phased in by January 1, 2022. In 2014, federal banking regulators also finalized rules to impose a supplementary leverage ratio on large BHCs like Wells Fargo and our insured depository institutions and to implement the Basel III liquidity coverage ratio. For more information on the final capital, leverage and liquidity rules, and additional capital requirements applicable to us, see the "Capital Management" section in this Report.

"Living Will" Requirements and Related Matters
Rules adopted by the FRB and the FDIC under the Dodd-Frank Act require large financial institutions, including Wells Fargo, to prepare and periodically revise resolution plans, so-called "living-wills", that would facilitate their resolution in the event of material distress or failure. Under the rules, resolution plans are required to provide strategies for resolution under the Bankruptcy Code and other applicable insolvency regimes that can be accomplished in a reasonable period of time and in a manner that mitigates the risk that failure would have serious adverse effects on the financial stability of the United States. On December 19, 2017, the FRB and FDIC announced that our most recent resolution plan submission did not have any deficiencies; however, they identified a specific shortcoming that would need to be addressed in our next submission. If the FRB or FDIC determines that our resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB or FDIC ultimately determines that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations.

We must also prepare and submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. Recovery options include the possible sale, transfer or disposal of assets, securities, loan portfolios or businesses. Our insured national bank subsidiary, Wells Fargo Bank, N.A. (the "Bank"), must also prepare and submit to the OCC a recovery plan that sets forth the bank's plan to remain a going concern when the bank is experiencing considerable financial or operational stress, but has not yet deteriorated to the point where liquidation or resolution is imminent. If either the FRB or the OCC determine that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the "orderly liquidation authority." The orderly liquidation authority allows for the appointment of the FDIC as receiver for a systemically important financial institution that is in default or in danger of default if, among other things, the resolution of the institution under the U.S. Bankruptcy Code would have serious adverse effects on financial stability in the United States. If the FDIC is appointed as receiver for Wells Fargo & Company (the "Parent"), then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of our security holders. The FDIC's orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses, and allows the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances.

Whether under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority, Wells Fargo could be resolved using a "multiple point of entry" strategy, in which the Parent and one or more of its subsidiaries would each undergo separate resolution proceedings, or a "single point of entry" strategy, in which the Parent would likely be the only material legal entity to enter resolution proceedings. The FDIC has announced that a single point of entry strategy may be a desirable strategy under its implementation of the orderly liquidation authority, but not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible.

The strategy described in our most recent resolution plan submission is a multiple point of entry strategy; however, we have made a decision to move to a single point of entry strategy for our next resolution plan submission. We are not obligated to maintain either a single point of entry or multiple point of entry strategy, and the strategies reflected in our resolution plan submissions are not binding in the event of an actual resolution of Wells Fargo, whether conducted under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority.

To facilitate the orderly resolution of systemically important financial institutions in case of material distress or failure, federal banking regulations require that institutions, such as Wells Fargo, maintain a minimum amount of equity and unsecured debt to absorb losses and recapitalize operating subsidiaries. Federal banking regulators have also required measures to facilitate the continued operation of operating subsidiaries notwithstanding the failure of their parent companies, such as limitations on parent guarantees, and have issued guidance encouraging institutions to take legally binding measures to provide capital and liquidity resources to certain subsidiaries in order to facilitate an orderly resolution. In response to the regulators' guidance and to facilitate the orderly resolution of the Company using either a single point of entry or multiple point of entry resolution strategy, on June 28, 2017, the Parent entered into a support agreement (the "Support Agreement") with WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), and the Bank, Wells Fargo Securities, LLC ("WFS"), and Wells Fargo Clearing Services, LLC ("WFCS"), each an indirect subsidiary of the Parent. Pursuant to the Support Agreement, the Parent transferred a significant amount of its assets, including the majority of its cash, deposits, liquid securities and intercompany loans (but excluding its equity interests in its subsidiaries and certain other assets), to the IHC and will continue to transfer those types of assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank pursuant to the Support Agreement and to WFS and WFCS through repurchase facilities entered into in connection with the Support Agreement. Under the Support Agreement, the IHC will also provide funding and liquidity to the Parent through subordinated notes and a committed line of credit, which, together with the issuance of dividends, is expected to provide the Parent, during business as usual operating conditions, with the same access to cash necessary to service its debts, pay dividends, repurchase its shares, and perform its other obligations as it would have had if it had not entered into these arrangements and transferred any assets. If certain liquidity and/or capital metrics fall below defined triggers, the subordinated notes would be forgiven and the committed line of credit would terminate, which could materially and adversely impact the Parent's liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented. The Parent's and the IHC's respective obligations under the Support Agreement are secured pursuant to a related security agreement.

Other Regulatory Related Matters

- *Department of Labor ERISA fiduciary standard.* In April 2016, the U.S. Department of Labor adopted a rule under the Employee Retirement Income Security Act of 1974 (ERISA) that, among other changes and subject to certain exceptions, as of the applicability date of June 9, 2017, makes anyone, including broker-dealers, providing investment advice to retirement investors a fiduciary who must act in the best interest of clients when providing investment advice for direct or indirect compensation to a retirement plan, to a plan fiduciary, participant or beneficiary, or to an investment retirement account (IRA) or IRA holder. The rule impacts the manner in which business is conducted with retirement investors and affects product offerings with respect to retirement plans and IRAs.
- *OCC revocation of relief.* On November 18, 2016, the OCC revoked provisions of certain consent orders that provided Wells Fargo Bank, N.A. relief from specific requirements and limitations regarding rules, policies, and procedures for corporate activities; OCC approval of changes in directors and senior executive officers; and golden parachute payments. As a result, Wells Fargo Bank, N.A. is no longer eligible for expedited treatment for certain applications; is now required to provide prior written notice to the OCC of a change in directors and senior executive officers; and is now subject to certain regulatory limitations on golden parachute payments.
- *Community Reinvestment Act (CRA) rating.* In March 2017, we announced that the OCC had downgraded our most recent CRA rating, which covers the years 2009 – 2012, to "Needs to Improve" due to previously issued regulatory consent orders. A "Needs to Improve" rating imposes regulatory restrictions and limitations on certain of the Company's nonbank activities, including its ability to engage in certain nonbank mergers and acquisitions or undertake new financial in nature activities, and CRA performance is taken into account by regulators in reviewing applications to establish bank branches and for approving proposed bank mergers and acquisitions. The rating also results in the loss of expedited processing of applications to undertake certain activities, and requires the Company to receive prior regulatory approval for certain activities, including to issue or prepay certain subordinated debt obligations, open or relocate bank branches, or make certain public welfare investments. In addition, a "Needs to Improve" rating could have an impact on the Company's relationships with certain states, counties, municipalities or other public agencies to the extent applicable law, regulation or policy limits, restricts or influences whether such entity may do business with a company that has a below "Satisfactory" rating.
- *FRB consent order regarding governance oversight and compliance and operational risk management.* On February 2, 2018, the Company entered into a consent order with the FRB, which requires the Company to submit to the FRB within 60 days of the date of the consent order plans to further enhance the Board's governance oversight and the Company's compliance and operational risk management. The consent order also requires third-party reviews related to the adoption and implementation of such plans by September 30, 2018. Until these third-party reviews are complete and the plans are approved and implemented to the satisfaction of the FRB, the Company's total consolidated assets will be limited to the level as of December 31, 2017. Compliance with this asset cap will be measured on a two-quarter daily average basis to allow for management of temporary fluctuations. Once the asset cap limitation is removed, a second third-party review must be conducted to assess the efficacy and sustainability of the improvements.

Critical Accounting Policies

Our significant accounting policies (see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report) are fundamental to understanding our results of operations and financial condition because they require that we use estimates and assumptions that may affect the value of our assets or liabilities and financial results. Five of these policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. These policies govern:

- the allowance for credit losses;
- the valuation of residential MSRs;
- the fair value of financial instruments;
- income taxes; and
- liability for contingent litigation losses.

Liability for contingent litigation losses was added as a new critical accounting policy in second quarter 2017, and the accounting policy for PCI loans was removed in fourth quarter 2017 due to no longer being deemed critical.

Management and the Board's Audit and Examination committee have reviewed and approved these critical accounting policies.

Allowance for Credit Losses

We maintain an allowance for credit losses, which consists of the allowance for loan losses and the allowance for unfunded credit commitments, which is management's estimate of credit losses inherent in the loan portfolio, including unfunded credit commitments, at the balance sheet date, excluding loans carried at fair value. For a description of our related accounting policies, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Changes in the allowance for credit losses and, therefore, in the related provision for credit losses can materially affect net income. In applying the judgment and review required to determine the allowance for credit losses, management considers changes in economic conditions, customer behavior, and collateral value, among other influences. From time to time, economic factors or business decisions, such as the addition or liquidation of a loan product or business unit, may affect the loan portfolio, causing management to provide for or release amounts from the allowance for credit losses. While our methodology attributes portions of the allowance to specific portfolio segments (commercial and consumer), the entire allowance for credit losses is available to absorb credit losses inherent in the total loan portfolio and unfunded credit commitments.

Judgment is specifically applied in:

- *Credit risk ratings applied to individual commercial loans and unfunded credit commitments.* We estimate the probability of default in accordance with the borrower's financial strength using a borrower quality rating and the severity of loss in the event of default using a collateral quality rating. Collectively, these ratings are referred to as credit risk ratings and are assigned to our commercial loans. Probability of default and severity at the time of default are statistically derived through historical observations of defaults and losses after default within each credit risk rating. Commercial loan risk ratings are evaluated based on each situation by experienced senior credit officers and are subject to periodic review by an internal team of credit specialists.
- *Economic assumptions applied to pools of consumer loans (statistically modeled).* Losses are estimated using economic variables to represent our best estimate of inherent loss. Our forecasted losses are modeled using a range of economic scenarios.
- *Selection of a credit loss estimation model that fits the credit risk characteristics of its portfolio.* We use both internally developed and vendor supplied models in this process. We often use expected loss, roll rate, net flow, vintage maturation, behavior score, and time series or statistical trend models, most with economic correlations. Management must use judgment in establishing additional input metrics for the modeling processes, considering further stratification into reference data time series, sub-product, origination channel, vintage, loss type, geographic location and other predictive characteristics. The models used to determine the allowance for credit losses are validated in accordance with Company policies by an internal model validation group.
- *Assessment of limitations to credit loss estimation models.* We apply our judgment to adjust our modeled estimates to reflect other risks that may be identified from current conditions and developments in selected portfolios.
- *Identification and measurement of impaired loans, including loans modified in a TDR.* Our experienced senior credit officers may consider a loan impaired based on their evaluation of current information and events, including loans modified in a TDR. The measurement of impairment is typically based on an analysis of the present value of expected future cash flows. The development of these expectations requires significant management judgment and review.
- *An amount for imprecision or uncertainty which reflects management's overall estimate of the effect of quantitative and qualitative factors on inherent credit losses.* This amount represents management's judgment of risks inherent in the processes and assumptions used in establishing the allowance for credit losses. This imprecision considers economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

SENSITIVITY TO CHANGES Table 59 demonstrates the impact of the sensitivity of our estimates on our allowance for credit losses.

Table 59: Allowance Sensitivity Summary

		December 31, 2017
(in billions)		Estimated increase/(decrease) in allowance
Assumption:		
Favorable (1)	$	(3.5)
Adverse (2)		6.3

(1) Represents a one risk rating upgrade throughout our commercial portfolio segment and a more optimistic economic outlook for modeled losses on our consumer portfolio segment.
(2) Represents a one risk rating downgrade throughout our commercial portfolio segment, a more pessimistic economic outlook for modeled losses on our consumer portfolio segment, and incremental deterioration for PCI loans.

The sensitivity analyses provided in the previous table are hypothetical scenarios and are not considered probable. They do not represent management's view of inherent losses in the portfolio as of the balance sheet date. Because significant judgment is used, it is possible that others performing similar analyses could reach different conclusions. See the "Risk Management – Credit Risk Management – Allowance for Credit Losses" section and Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report for further discussion of our allowance for credit losses.

Valuation of Residential Mortgage Servicing Rights (MSRs)

MSRs are assets that represent the rights to service mortgage loans for others. We recognize MSRs when we purchase servicing rights from third parties, or retain servicing rights in connection with the sale or securitization of loans we originate (asset transfers). We also have MSRs acquired in the past under co-issuer agreements that provide for us to service loans that were originated and securitized by third-party correspondents.

We carry our MSRs related to residential mortgage loans at fair value. Periodic changes in our residential MSRs and the economic hedges used to hedge our residential MSRs are reflected in earnings.

We use a model to estimate the fair value of our residential MSRs. The model is validated by an internal model validation group operating in accordance with Company policies. The model calculates the present value of estimated future net servicing income and incorporates inputs and assumptions that market participants use in estimating fair value. Certain significant inputs and assumptions are not observable in the market and require judgment to determine:

- *The mortgage loan prepayment speed used to estimate future net servicing income.* The prepayment speed is the annual rate at which borrowers are forecasted to repay their mortgage loan principal; this rate also includes estimated borrower defaults. We use models to estimate prepayment speeds and borrower defaults which are influenced by changes in mortgage interest rates and borrower behavior.
- *The discount rate used to present value estimated future net servicing income.* The discount rate is the required rate of return investors in the market would expect for an asset with similar risk. To determine the discount rate, we consider the risk premium for uncertainties from servicing operations (e.g., possible changes in future servicing costs, ancillary income and earnings on escrow accounts).
- *The expected cost to service loans used to estimate future net servicing income.* The cost to service loans includes estimates for unreimbursed expenses, such as delinquency and foreclosure costs, which considers the number of defaulted loans as well as changes in servicing processes associated with default and foreclosure management.

Both prepayment speed and discount rate assumptions can, and generally will, change quarterly as market conditions and mortgage interest rates change. For example, an increase in either the prepayment speed or discount rate assumption results in a decrease in the fair value of the MSRs, while a decrease in either assumption would result in an increase in the fair value of the MSRs. In recent years, there have been significant market-driven fluctuations in loan prepayment speeds and the discount rate. These fluctuations can be rapid and may be significant in the future. Additionally, while our current valuation reflects our best estimate of servicing costs, future regulatory or investor changes in servicing standards, as well as changes in individual state foreclosure legislation, may have an impact on our servicing cost assumption and our MSR valuation in future periods.

For a description of our valuation and sensitivity of MSRs, see Note 1 (Summary of Significant Accounting Policies), Note 8 (Securitizations and Variable Interest Entities), Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

Fair Value of Financial Instruments

Fair value represents the price that would be received to sell the financial asset or paid to transfer the financial liability in an orderly transaction between market participants at the measurement date.

We use fair value measurements to record fair value adjustments to certain financial instruments and to determine fair value disclosures. For example, trading assets, securities available for sale, derivatives and substantially all of our residential MHFS are carried at fair value each period. Other financial instruments, such as certain MHFS and substantially all of our loans held for investment, are not carried at fair value each period but may require nonrecurring fair value adjustments due to application of lower-of-cost-or-market accounting or write-downs of individual assets. We also disclose our estimate of fair value for financial instruments not recorded at fair value, such as loans held for investment or issuances of long-term debt.

The accounting provisions for fair value measurements include a three-level hierarchy for disclosure of assets and liabilities recorded at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used for measurement are observable or unobservable. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect our estimates about market data. For additional information on fair value levels, see Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

When developing fair value measurements, we maximize the use of observable inputs and minimize the use of unobservable inputs. When available, we use quoted prices in active markets to measure fair value. If quoted prices in active markets are not available, fair value measurement is based upon models that use primarily market-based or independently sourced market parameters, including interest rate yield curves, prepayment speeds, option volatilities and currency rates.

However, in certain cases, when market observable inputs for model-based valuation techniques are not readily available, we are required to make judgments about assumptions market participants would use to estimate fair value. Additionally, we use third party pricing services to obtain fair values, which are used to either record the price of an instrument or to corroborate internally developed prices. For additional information on our use of pricing services, see Note 1 (Summary of Significant Accounting Policies) and Note 17 (Fair Value of Assets and Liabilities) to Financial Statements in this Report.

The degree of management judgment involved in determining the fair value of a financial instrument is dependent upon the availability of quoted prices in active markets or observable market parameters. For financial instruments with quoted market prices or observable market parameters in active markets, there is minimal subjectivity involved in measuring fair value. When quoted prices and observable data in active markets are not fully available, management judgment is necessary to estimate fair value. Changes in the market conditions, such as reduced liquidity in the capital markets or changes in secondary market activities, may reduce the availability and reliability of quoted prices or observable data used to determine fair value. When significant adjustments are required to price quotes or inputs, it may be appropriate to utilize an estimate based primarily on unobservable inputs. When an active market for a financial instrument does not exist, the use of management estimates that incorporate current market participant expectations of future cash flows, adjusted for an appropriate risk premium, is acceptable.

Significant judgment is also required to determine whether certain assets measured at fair value are classified as Level 2 or Level 3 of the fair value hierarchy as described in Note 17 (Fair Value of Assets and Liabilities) to Financial Statements in this Report. When making this judgment, we consider available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs used. For securities in inactive markets, we use a predetermined percentage to evaluate the impact of fair value adjustments derived from weighting both external and internal indications of value to determine if the instrument is classified as Level 2 or Level 3. Otherwise, the classification of Level 2 or Level 3 is based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of the Level 3 inputs to the instruments' fair value measurement in its entirety. If Level 3 inputs are considered significant, the instrument is classified as Level 3.

Table 60 presents the summary of the fair value of financial instruments recorded at fair value on a recurring basis, and the amounts measured using significant Level 3 inputs (before derivative netting adjustments). The fair value of the remaining assets and liabilities were measured using valuation methodologies involving market-based or market-derived information (collectively Level 1 and 2 measurements).

Table 60: Fair Value Level 3 Summary

	December 31, 2017		December 31, 2016	
($ in billions)	**Total balance**	**Level 3 (1)**	Total balance	Level 3 (1)
Assets carried at fair value	**$ 416.6**	**24.9**	436.3	23.5
As a percentage of total assets	**21%**	**1**	23	1
Liabilities carried at fair value	**$ 27.3**	**2.0**	30.9	1.7
As a percentage of total liabilities	**2%**	*****	2	*

* Less than 1%.
(1) Before derivative netting adjustments.

See Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report for a complete discussion on our fair value of financial instruments, our related measurement techniques and the impact to our financial statements.

Income Taxes

We file consolidated and separate company U.S. federal income tax returns, foreign tax returns and various combined and separate company state tax returns. We evaluate two components of income tax expense: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to our uncertain tax positions. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. We determine deferred income taxes using the balance sheet method. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax bases of assets and liabilities, and recognizes enacted changes in tax rates and laws in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not." Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits. We account for interest and penalties as a component of income tax expense. For prior reporting periods, we did not record U.S. tax on undistributed earnings of certain non-U.S. subsidiaries to the extent the earnings were indefinitely reinvested outside of the U.S. Foreign taxes paid are generally applied as credits to reduce U.S. income taxes payable. However, in 2017, we recorded an estimate of the U.S. tax expense associated with a deemed repatriation of the Company's previously undistributed foreign earnings as required under the Tax Act.

The income tax laws of the jurisdictions in which we operate are complex and subject to different interpretations by the taxpayer and the relevant government taxing authorities. In establishing a provision for income tax expense, we must make judgments and interpretations about the application of these inherently complex tax laws. We must also make estimates about when in the future certain items will affect taxable income in the various tax jurisdictions, both domestic and foreign. Our interpretations may be subjected to review during examination by taxing authorities and disputes may arise over the respective tax positions. We attempt to resolve these disputes during the tax examination and audit process and ultimately through the court systems when applicable.

We monitor relevant tax authorities and revise our estimate of accrued income taxes due to changes in income tax laws and their interpretation by the courts and regulatory authorities on a quarterly basis. Revisions of our estimate of accrued income taxes also may result from our own income tax planning and from the resolution of income tax controversies. Such revisions in our estimates may be material to our operating results for any given quarter.

See Note 22 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Liability for Contingent Litigation Losses

The Company is involved in a number of judicial, regulatory, arbitration and other proceedings concerning matters arising from the conduct of its business activities, and many of those proceedings expose the Company to potential financial loss. We establish accruals for these legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

We apply judgment when establishing an accrual for potential losses associated with legal actions and in establishing the range of reasonably possible losses in excess of the accrual. Our judgment in establishing accruals and the range of reasonably possible losses in excess of the Company's accrual for probable and estimable losses is influenced by our understanding of information currently available related to the legal evaluation and potential outcome of actions, including input and advice on these matters from our internal counsel, external counsel and senior management. These matters may be in various stages of investigation, discovery or proceedings. They may also involve a wide variety of claims across our businesses, legal entities and jurisdictions. The eventual outcome may be a scenario that was not considered or was considered remote in anticipated occurrence. Accordingly, our estimate of potential losses will change over time and the actual losses may vary significantly.

The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss.

See Note 15 (Legal Actions) to Financial Statements in this Report for further information.

Current Accounting Developments

Table 61 lists the significant accounting updates applicable to us that have been issued by the FASB but are not yet effective.

Table 61: Current Accounting Developments – Issued Standards

Standard	Description	Effective date and financial statement impact
Accounting Standards Update (ASU or Update) 2018-02 – Income Statement-Reporting Comprehensive Income (Topic 220): *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*	Currently, the effect of remeasuring deferred tax assets and liabilities due to a change in tax laws or rates must be recognized in income from continuing operations in the reporting period that includes the enactment date. That guidance is applicable even in situations in which the related income tax effects were originally recognized in other comprehensive income. The Update permits a one-time reclassification from accumulated other comprehensive income to retained earnings for these stranded tax effects resulting from the Tax Cuts and Jobs Act.	The guidance is effective on January 1, 2019. Early application is permitted in any interim period prior to the effective date. Application of the new guidance will result in an increase in retained earnings of approximately $400 million.
ASU 2017-08 – Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): *Premium Amortization on Purchased Callable Debt Securities*	The Update changes the accounting for certain purchased callable debt securities held at a premium to shorten the amortization period for the premium to the earliest call date rather than to the maturity date. Accounting for purchased callable debt securities held at a discount does not change. The discount would continue to amortize to the maturity date.	We expect to adopt the guidance in first quarter 2019 using the modified retrospective method with a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption. Our investment securities portfolio includes holdings of available-for-sale (AFS) and held-to-maturity (HTM) callable debt securities held at a premium. At adoption, the guidance is expected to result in a cumulative effect adjustment which will be primarily offset with a corresponding adjustment to other comprehensive income related to AFS securities. After adoption, the guidance will reduce interest income prior to the call date because the premium will be amortized over a shorter time period. Our implementation effort includes identifying the population of debt securities subject to the new guidance, which are primarily obligations of U.S. states and political subdivisions, and quantifying the expected impacts. The impact of the Update on our consolidated financial statements will be affected by our portfolio composition at the time of adoption, which may change between December 31, 2017, and the adoption date.
ASU 2016-18 – Statement of Cash Flows (Topic 230): *Restricted Cash*	The Update requires that restricted cash and cash equivalents are included with the total cash and cash equivalents in the consolidated statement of cash flows. In addition, the nature of any restrictions will be disclosed in the footnotes to the financial statements.	We adopted the guidance in first quarter 2018 with retrospective application. We will change the presentation of our cash and cash equivalents on our consolidated statement of cash flows to include both cash and due from banks as well as interest-earning deposits with banks, which are inclusive of any restricted cash. We will make a corresponding change to our consolidated balance sheets.
ASU 2016-13 – Financial Instruments – Credit Losses (Topic 326): *Measurement of Credit Losses on Financial Instruments*	The Update changes the accounting for credit losses on loans and debt securities. For loans and held-to-maturity debt securities, the Update requires a current expected credit loss (CECL) approach to determine the allowance for credit losses. CECL requires loss estimates for the remaining estimated life of the financial asset using historical experience, current conditions, and reasonable and supportable forecasts. Also, the Update eliminates the existing guidance for PCI loans, but requires an allowance for purchased financial assets with more than insignificant deterioration since origination. In addition, the Update modifies the other-than-temporary impairment model for available-for-sale debt securities to require an allowance for credit impairment instead of a direct write-down, which allows for reversal of credit impairments in future periods based on improvements in credit.	The guidance is effective in first quarter 2020 with a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption. While early adoption is permitted beginning in first quarter 2019, we do not expect to elect that option. We are evaluating the impact of the Update on our consolidated financial statements. We expect the Update will result in an increase in the allowance for credit losses given the change to estimated losses over the contractual life adjusted for expected prepayments with an anticipated material impact from longer duration portfolios, as well as the addition of an allowance for debt securities. The amount of the increase will be impacted by the portfolio composition and credit quality at the adoption date as well as economic conditions and forecasts at that time.

Standard	Description	Effective date and financial statement impact
ASU 2016-04 – Liabilities – Extinguishments of Liabilities (Subtopic 405-20): *Recognition of Breakage for Certain Prepaid Stored-Value Products*	The Update modifies the accounting for certain prepaid card products to require the recognition of breakage. Breakage represents the estimated amount that will not be redeemed by the cardholder for goods or services.	We adopted the Update in first quarter 2018 with a cumulative-effect adjustment to opening retained earnings. The new guidance resulted in a reduction in the balance of the liability, with an increase to retained earnings given estimated breakage at the date of adoption of approximately $26 million.
ASU 2016-02 – Leases (Topic 842)	The Update requires lessees to recognize leases on the balance sheet with lease liabilities and corresponding right-of-use assets based on the present value of lease payments. Lessor accounting activities are largely unchanged from existing lease accounting. The Update also eliminates leveraged lease accounting but allows existing leveraged leases to continue their current accounting until maturity, termination or modification.	We expect to adopt the guidance in first quarter 2019 using the modified retrospective method and practical expedients for transition. The practical expedients allow us to largely account for our existing leases consistent with current guidance except for the incremental balance sheet recognition for lessees. We have started our implementation of the Update which has included an initial evaluation of our leasing contracts and activities. As a lessee we are developing our methodology to estimate the right-of use assets and lease liabilities, which is based on the present value of lease payments (the December 31, 2017, future minimum lease payments were $6.6 billion, as disclosed in Table 7.2 of Note 7 (Premises, Equipment, Lease Commitments and Other Assets) in this Report). We do not expect a material change to the timing of expense recognition. Given the limited changes to lessor accounting, we do not expect material changes to recognition or measurement, but we continue to evaluate the guidance and application to our activities. We are evaluating our existing disclosures and will provide additional information as a result of adoption of the Update.
ASU 2016-01 – Financial Instruments – Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*	The Update amends the presentation and accounting for certain financial instruments, including liabilities measured at fair value under the fair value option and equity investments. The guidance also updates fair value presentation and disclosure requirements for financial instruments measured at amortized cost.	We adopted the Update in first quarter 2018 and recorded a cumulative-effect adjustment as of January 1, 2018 that increased retained earnings $106 million and decreased other comprehensive income $118 million. Our investments in marketable equity securities classified as available-for-sale as of the adoption date will be accounted for at fair value with unrealized gains or losses reflected in earnings. Additionally, our share of the unrealized gains or losses of marketable equity securities held by investees in our nonmarketable equity investments accounted for using the equity method will be reflected in earnings as of the adoption date. Previously, such unrealized gains or losses were reflected in other comprehensive income. Upon adoption, we recorded a transition adjustment to reclassify $118 million in net unrealized gains from other comprehensive income to retained earnings. The accounting for our investments in nonmarketable equity instruments accounted for under the cost method of accounting at the adoption date, except for Federal bank stock, will be measured either, at fair value with unrealized gains and losses reflected in earnings, or the measurement alternative. The measurement alternative is similar to the cost method of accounting, except the carrying value is adjusted through earnings for subsequent observable transactions in the same or similar investment. We will account for substantially all of our private equity cost method investments using the measurement alternative and our auction rate securities portfolio will be accounted for at fair value with unrealized gains and losses reflected in earnings. Upon adoption, we recorded a transition adjustment of $12 million to decrease retained earnings from our auction rates securities portfolio at fair value. No transition adjustment is recorded for those investments changing to the measurement alternative, which is applied prospectively. In connection with our adoption of this Update, we will present all holdings of marketable equity securities accounted for as available-for-sale and as trading assets as well as nonmarketable equity investments in a new line on the balance sheet labeled "Equity investments." We will also eliminate the "Trading assets" line on the balance sheet and present trading securities and trading loans in other line items consistent with their form. Additionally, for purposes of disclosing the fair value of loans carried at amortized cost, we will determine the fair value based on "exit price" as required by the Update. Accordingly, the fair value amounts disclosed for such loans will change upon adoption of the Update.

Standard	Description	Effective date and financial statement impact
ASU 2014-09 – Revenue from Contracts With Customers (Topic 606) and subsequent related Updates	The Update modifies the guidance used to recognize revenue from contracts with customers for transfers of goods or services and transfers of nonfinancial assets, unless those contracts are within the scope of other guidance. The Update also requires new qualitative and quantitative disclosures, including disaggregation of revenues and descriptions of performance obligations.	We adopted the Update in first quarter 2018, and recorded a cumulative-effect adjustment to opening retained earnings to reflect application of the new guidance effective January 1, 2018. This adjustment, which decreased retained earnings by $44 million, is due to changes in the timing of revenue for corporate trust services that are provided over the life of the associated trust. Our accounting policies did not change materially since the principles of revenue recognition from the Update are largely consistent with the prior guidance and practices applied by our businesses. Accordingly, we do not have material changes to the timing or amount of revenue recognition. However, the presentation of some costs associated with the contracts of our broker-dealer and card businesses will change beginning in first quarter 2018. These presentation changes will reduce our revenue with a corresponding offset to reduce expenses. Based on results for 2017, we do not expect the impact of this prospective presentation change to be material to our total revenue and expenses. In Note 20 (Revenue from Contracts with Customers) to Financial Statements in this Report, we describe our key sources of revenue that are within the scope of the new guidance, and include qualitative disclosures to describe how revenue is recognized for the types of services performed. In first quarter 2018, we will provide additional disaggregation of specific categories of revenue, including service charges on deposit accounts, brokerage advisory, trust and investment management, and card fees.

In addition to the list above, the following Updates are applicable to us but are not expected to have a material impact on our consolidated financial statements:

- ASU 2017-11 – Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): *(Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*
- ASU 2017-09 – Compensation – Stock Compensation (Topic 718): *Scope of Modification Accounting*
- ASU 2017-07 – Compensation – Retirement Benefits (Topic 715): *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*
- ASU 2017-04 – Intangibles – Goodwill and Other (Topic 350): *Simplifying the Test for Goodwill Impairment*
- ASU 2017-03 – Accounting Changes and Error Corrections (Topic 250) and Investments-Equity Method and Joint Ventures (Topic 323): *Amendments to SEC Paragraphs Pursuant to Staff Announcements at the September 22, 2016 and November 17, 2016 EITF Meetings (SEC Update)*
- ASU 2017-01 – Business Combinations (Topic 805): *Clarifying the Definition of a Business*
- ASU 2016-16 – Income Taxes (Topic 740): *Intra-Entity Transfers of Assets Other Than Inventory*
- ASU 2016-15 – Statement of Cash Flows (Topic 230): *Classification of Certain Cash Receipts and Cash Payments*

Forward-Looking Statements

This document contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, we may make forward-looking statements in our other documents filed or furnished with the SEC, and our management may make forward-looking statements orally to analysts, investors, representatives of the media and others. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “target,” “projects,” “outlook,” “forecast,” “will,” “may,” “could,” “should,” “can” and similar references to future periods. In particular, forward-looking statements include, but are not limited to, statements we make about: (i) the future operating or financial performance of the Company, including our outlook for future growth; (ii) our noninterest expense and efficiency ratio; (iii) future credit quality and performance, including our expectations regarding future loan losses and allowance levels; (iv) the appropriateness of the allowance for credit losses; (v) our expectations regarding net interest income and net interest margin; (vi) loan growth or the reduction or mitigation of risk in our loan portfolios; (vii) future capital or liquidity levels or targets and our estimated Common Equity Tier 1 ratio under Basel III capital standards; (viii) the performance of our mortgage business and any related exposures; (ix) the expected outcome and impact of legal, regulatory and legislative developments, as well as our expectations regarding compliance therewith; (x) future common stock dividends, common share repurchases and other uses of capital; (xi) our targeted range for return on assets and return on equity; (xii) the outcome of contingencies, such as legal proceedings; and (xiii) the Company’s plans, objectives and strategies.

Forward-looking statements are not based on historical facts but instead represent our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. While there is no assurance that any list of risks and uncertainties or risk factors is complete, important factors that could cause actual results to differ materially from those in the forward-looking statements include the following, without limitation:

- current and future economic and market conditions, including the effects of declines in housing prices, high unemployment rates, U.S. fiscal debt, budget and tax matters (including the impact of the Tax Cuts & Jobs Act), geopolitical matters, and the overall slowdown in global economic growth;
- our capital and liquidity requirements (including under regulatory capital standards, such as the Basel III capital standards) and our ability to generate capital internally or raise capital on favorable terms;
- financial services reform and other current, pending or future legislation or regulation that could have a negative effect on our revenue and businesses, including the Dodd-Frank Act and other legislation and regulation relating to bank products and services;
- the extent of our success in our loan modification efforts, as well as the effects of regulatory requirements or guidance regarding loan modifications;
- the amount of mortgage loan repurchase demands that we receive and our ability to satisfy any such demands without having to repurchase loans related thereto or otherwise indemnify or reimburse third parties, and the credit quality of or losses on such repurchased mortgage loans;
- negative effects relating to our mortgage servicing and foreclosure practices, as well as changes in industry standards or practices, regulatory or judicial requirements, penalties or fines, increased servicing and other costs or obligations, including loan modification requirements, or delays or moratoriums on foreclosures;
- our ability to realize our efficiency ratio target as part of our expense management initiatives, including as a result of business and economic cyclicality, seasonality, changes in our business composition and operating environment, growth in our businesses and/or acquisitions, and unexpected expenses relating to, among other things, litigation and regulatory matters;
- the effect of the current low interest rate environment or changes in interest rates on our net interest income, net interest margin and our mortgage originations, mortgage servicing rights and mortgages held for sale;
- significant turbulence or a disruption in the capital or financial markets, which could result in, among other things, reduced investor demand for mortgage loans, a reduction in the availability of funding or increased funding costs, and declines in asset values and/or recognition of other-than-temporary impairment on securities held in our investment securities portfolio;
- the effect of a fall in stock market prices on our investment banking business and our fee income from our brokerage, asset and wealth management businesses;
- negative effects from the retail banking sales practices matter and from other instances where customers may have experienced financial harm, including on our legal, operational and compliance costs, our ability to engage in certain business activities or offer certain products or services, our ability to keep and attract customers, our ability to attract and retain qualified team members, and our reputation;
- reputational damage from negative publicity, protests, fines, penalties and other negative consequences from regulatory violations and legal actions;
- a failure in or breach of our operational or security systems or infrastructure, or those of our third party vendors or other service providers, including as a result of cyber attacks;
- the effect of changes in the level of checking or savings account deposits on our funding costs and net interest margin;
- fiscal and monetary policies of the Federal Reserve Board; and
- the other risk factors and uncertainties described under "Risk Factors" in this Report.

In addition to the above factors, we also caution that the amount and timing of any future common stock dividends or repurchases will depend on the earnings, cash requirements and financial condition of the Company, market conditions, capital requirements (including under Basel capital standards), common stock issuance requirements, applicable law and regulations (including federal securities laws and federal banking regulations), and other factors deemed relevant by the Company's Board of Directors, and may be subject to regulatory approval or conditions.

For more information about factors that could cause actual results to differ materially from our expectations, refer to our reports filed with the Securities and Exchange Commission, including the discussion under "Risk Factors" in this Report, as filed with the Securities and Exchange Commission and available on its website at www.sec.gov.

Any forward-looking statement made by us speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Risk Factors

An investment in the Company involves risk, including the possibility that the value of the investment could fall substantially and that dividends or other distributions on the investment could be reduced or eliminated. We discuss below risk factors that could adversely affect our financial results and condition, and the value of, and return on, an investment in the Company.

RISKS RELATED TO THE ECONOMY, FINANCIAL MARKETS, INTEREST RATES AND LIQUIDITY

As one of the largest lenders in the U.S. and a provider of financial products and services to consumers and businesses across the U.S. and internationally, our financial results have been, and will continue to be, materially affected by general economic conditions, particularly unemployment levels and home prices in the U.S., and a deterioration in economic conditions or in the financial markets may materially adversely affect

our lending and other businesses and our financial results and condition. We generate revenue from the interest and fees we charge on the loans and other products and services we sell, and a substantial amount of our revenue and earnings comes from the net interest income and fee income that we earn from our consumer and commercial lending and banking businesses, including our mortgage banking business where we currently are the largest mortgage originator in the U.S. These businesses have been, and will continue to be, materially affected by the state of the U.S. economy, particularly unemployment levels and home prices. Although the U.S. economy has continued to gradually improve from the depressed levels of 2008 and early 2009, economic growth has been slow and uneven. In addition, the negative effects and continued uncertainty stemming from U.S. fiscal and political matters, including concerns about deficit levels, taxes and U.S. debt ratings, have impacted and may continue to impact the continuing global economic recovery. Moreover, geopolitical matters, including international political unrest or disturbances, Britain's vote to withdraw from the European Union, as well as continued concerns over commodity prices and global economic difficulties, may impact the stability of financial markets and the global economy. In particular, Britain's vote to withdraw from the European Union could increase economic barriers between Britain and the European Union, limit our ability to conduct business in the European Union, impose additional costs on us, subject us to different laws, regulations and/or regulatory authorities, or adversely impact our business, financial results and operating model. A prolonged period of slow growth in the global economy, particularly in the U.S., or any deterioration in general economic conditions and/or the financial markets resulting from the above matters or any other events or factors that may disrupt or dampen the global economic recovery, could materially adversely affect our financial results and condition.

A weakening in business or economic conditions, including higher unemployment levels or declines in home prices, can also adversely affect our borrowers' ability to repay their loans, which can negatively impact our credit performance. If unemployment levels worsen or if home prices fall we would expect to incur elevated charge-offs and provision expense from increases in our allowance for credit losses. These conditions may adversely affect not only consumer loan performance but also commercial and CRE loans, especially for those business borrowers that rely on the health of industries that may experience deteriorating economic conditions. The ability of these and other borrowers to repay their loans may deteriorate, causing us, as one of the largest commercial and CRE lenders in the U.S., to incur significantly higher credit losses. In addition, weak or deteriorating economic conditions make it more challenging for us to increase our consumer and commercial loan portfolios by making loans to creditworthy borrowers at attractive yields. Furthermore, weak economic conditions, as well as competition and/or increases in interest rates, could soften demand for our loans resulting in our retaining a much higher amount of lower yielding liquid assets on our balance sheet. If economic conditions do not continue to improve or if the economy worsens and unemployment rises, which also would likely result in a decrease in consumer and business confidence and spending, the demand for our credit products, including our mortgages, may fall, reducing our interest and noninterest income and our earnings.

A deterioration in business and economic conditions, which may erode consumer and investor confidence levels, and/or increased volatility of financial markets, also could adversely affect financial results for our fee-based businesses, including our investment advisory, mutual fund, securities brokerage, wealth management, and investment banking businesses. In 2017, approximately 25% of our revenue was fee income, which included trust and investment fees, card fees and other fees. We earn fee income from managing assets for others and providing brokerage and other investment advisory and wealth management services. Because investment management fees are often based on the value of assets under management, a fall in the market prices of those assets could reduce our fee income. Changes in stock market prices could affect the trading activity of investors, reducing commissions and other fees we earn from our brokerage business. The U.S. stock market experienced all-time highs in 2017, but also experienced significant volatility and there is no guarantee that high price levels will continue. Poor economic conditions and volatile or unstable financial markets also can negatively affect our debt and equity underwriting and advisory businesses, as well as our trading and venture capital businesses. Any deterioration in global financial markets and economies, including as a result of any international political unrest or disturbances, may adversely affect the revenues and earnings of our international operations, particularly our global financial institution and correspondent banking services.

For more information, refer to the "Risk Management – Asset/Liability Management" and "– Credit Risk Management" sections in this Report.

Changes in interest rates and financial market values could reduce our net interest income and earnings, as well as our other comprehensive income, including as a result of recognizing losses or OTTI on the securities that we hold in our portfolio or trade for our customers. Our net interest income is the interest we earn on loans, debt securities and other assets we hold less the interest we pay on our deposits, long-term and short-term debt, and other liabilities. Net interest income is a measure of both our net interest margin – the difference between the yield we earn on our assets and the interest rate we pay for deposits and our other sources of funding – and the amount of earning assets we hold. Changes in either our net interest margin or the amount or mix of earning assets we hold could affect our net interest income and our earnings. Changes in interest rates can affect our net interest margin. Although the yield we earn on our assets and our funding costs tend to move in the same direction in response to changes in interest rates, one can rise or fall faster than the other, causing our net interest margin to expand or contract. If our funding costs rise faster than the yield we earn on our assets or if the yield we earn on our assets falls faster than our funding costs, our net interest margin could contract.

The amount and type of earning assets we hold can affect our yield and net interest margin. We hold earning assets in the form of loans and investment securities, among other assets. As noted above, if the economy worsens we may see lower demand for loans by creditworthy customers, reducing our net interest income and yield. In addition, our net interest income and net interest margin can be negatively affected by a prolonged low interest rate environment, which is currently being experienced as a result of economic conditions and FRB monetary policies, as it may result in us holding lower yielding loans and securities on our balance sheet, particularly if we are unable to replace the maturing higher yielding assets with similar higher yielding assets. Increases in interest rates, however, may negatively affect loan demand and could result in higher credit losses as borrowers may have more difficulty making higher interest payments. As described below, changes in interest rates also affect our mortgage business, including the value of our MSRs.

Changes in the slope of the "yield curve" – or the spread between short-term and long-term interest rates – could also reduce our net interest margin. Normally, the yield curve is upward sloping, meaning short-term rates are lower than long-term rates. When the yield curve flattens, or even inverts, our net interest margin could decrease if the cost of our short-term funding increases relative to the yield we can earn on our long-term assets.

The interest we earn on our loans may be tied to U.S.-denominated interest rates such as the federal funds rate while the interest we pay on our debt may be based on international rates such as LIBOR. If the federal funds rate were to fall without a corresponding decrease in LIBOR, we might earn less on our loans without any offsetting decrease in our funding costs. This could lower our net interest margin and our net interest income. In addition, our floating rate funding, certain hedging transactions, and certain of the products that we offer, such as floating rate loans and derivatives in connection with customer accommodation activities, reference a benchmark rate, such as LIBOR, or other financial metric in order to determine the applicable interest rate or payment amount. In the event any such benchmark rate or other referenced financial metric is significantly changed, replaced or discontinued (for example, if LIBOR is discontinued), there may be uncertainty or differences in the calculation of the applicable interest rate or payment amount depending on the terms of the governing instrument and there may be significant work required to transition to using any new benchmark rate or other financial metric. This could result in different financial performance for previously booked transactions, require different hedging strategies, or require renegotiation of previously booked transactions, and may impact our existing transaction data, products, systems, operations and pricing processes.

We assess our interest rate risk by estimating the effect on our earnings under various scenarios that differ based on assumptions about the direction, magnitude and speed of interest rate changes and the slope of the yield curve. We hedge some of that interest rate risk with interest rate derivatives. We also rely on the "natural hedge" that our mortgage loan originations and servicing rights can provide.

We generally do not hedge all of our interest rate risk. There is always the risk that changes in interest rates, credit spreads or option volatility could reduce our net interest income and earnings, as well as our other comprehensive income, in material amounts, especially if actual conditions turn out to be materially different than what we assumed. For example, if interest rates rise or fall faster than we assumed or the slope of the yield curve changes, we may incur significant losses on debt securities we hold as investments. To reduce our interest rate risk, we may rebalance our investment and loan portfolios, refinance our debt and take other strategic actions. We may incur losses when we take such actions.

We hold securities in our investment securities portfolio, including U.S. Treasury and federal agency securities and federal agency MBS, securities of U.S. states and political subdivisions, residential and commercial MBS, corporate debt securities, other asset-backed securities and marketable equity securities, including securities relating to our venture capital activities. We analyze securities held in our investment securities portfolio for OTTI on at least a quarterly basis. The process for determining whether impairment is other than temporary usually requires difficult, subjective judgments about the future financial performance of the issuer and any collateral underlying the security in order to assess the probability of receiving contractual principal and interest payments on the security. Because of changing economic and market conditions, as well as credit ratings, affecting issuers and the performance of the underlying collateral, we may be required to recognize OTTI in future periods. In particular, economic difficulties in the oil and gas industry resulting from prolonged low oil prices may further impact our energy sector investments and require us to recognize OTTI in these investments in future periods. Furthermore, the value of the securities we hold in our investment securities portfolio can fluctuate due to changes in interest rates and other factors. For example, the value of our investments in asset-backed securities can fluctuate due to changes in interest rates, credit spreads, and prepayment rates, as well as defaults by the borrowers on the underlying exposures. The value of our investments in municipal bonds may decline if tax reform, including lower income tax rates, affects the attractiveness of investing in such types of securities. Our net income also is exposed to changes in interest rates, credit spreads, foreign exchange rates, and equity and commodity prices in connection with our trading activities, which are conducted primarily to accommodate the investment and risk management activities of our customers, as well as when we execute economic hedging to manage certain balance sheet risks. The securities held in these activities are carried at fair value with realized and unrealized gains and losses recorded in noninterest income. As part of our business to support our customers, we trade public securities and these securities also are subject to market fluctuations with gains and losses recognized in net income when realized and periodically include OTTI charges. In addition, although high market volatility can increase our exposure to trading-related losses, periods of low volatility may have an adverse effect on our businesses as a result of reduced customer activity levels. Although we have processes in place to measure and monitor the risks associated with our trading activities, including stress testing and hedging strategies, there can be no assurance that our processes and strategies will be effective in avoiding losses that could have a material adverse effect on our financial results.

The value of our public and private equity investments can fluctuate from quarter to quarter. Certain of these investments are carried under the cost or equity method, while others are carried at fair value with unrealized gains and losses reflected in earnings. Earnings from our equity investments may be volatile and hard to predict, and may have a significant effect on our earnings from period to period. When, and if, we recognize gains may depend on a number of factors, including general economic and market conditions, the prospects of the companies in which we invest, when a company goes public, the size of our position relative to the public float, and whether we are subject to any resale restrictions.

Our venture capital investments could result in significant OTTI losses for those investments carried under the cost or equity method. Our assessment for OTTI is based on a number of factors, including the then current market value of each investment compared with its carrying value. If we determine there is OTTI for an investment, we write-down the carrying value of the investment, resulting in a charge to earnings. The amount of this charge could be significant.

For more information, refer to the "Risk Management – Asset/Liability Management – Interest Rate Risk", "– Mortgage Banking Interest Rate and Market Risk", "– Market Risk – Trading Activities", and "– Market Risk – Equity Investments" and the "Balance Sheet Analysis – Investment Securities" sections in this Report and Note 5 (Investment Securities) to Financial Statements in this Report.

Effective liquidity management, which ensures that we can meet customer loan requests, customer deposit maturities/withdrawals and other cash commitments, including principal and interest payments on our debt, efficiently under both normal operating conditions and other unpredictable circumstances of industry or financial market stress, is essential for the operation of our business, and our financial results and condition could be materially adversely affected if we do not effectively manage our liquidity. Our liquidity is essential for the operation of our business. We primarily rely on bank deposits to be a low cost and stable source of funding for the loans we make and the operation of our business. Customer deposits, which include noninterest-bearing deposits, interest-bearing checking, savings certificates, certain market rate and other savings, and certain foreign deposits, have historically provided us with a sizeable source of relatively stable and low-cost funds. In addition to customer deposits, our sources of liquidity include investments in our securities portfolio, our ability to sell or securitize loans in secondary markets and to pledge loans to access secured borrowing facilities through the FHLB and the FRB, and our ability to raise funds in domestic and international money through capital markets.

Our liquidity and our ability to fund and run our business could be materially adversely affected by a variety of conditions and factors, including financial and credit market disruption and volatility or a lack of market or customer confidence in financial markets in general similar to what occurred during the financial crisis in 2008 and early 2009, which may result in a loss of customer deposits or outflows of cash or collateral and/or our inability to access capital markets on favorable terms. Market disruption and volatility could impact our credit spreads, which are the amount in excess of the interest rate of U.S. Treasury securities, or other benchmark securities, of the same maturity that we need to pay to our funding providers. Increases in interest rates and our credit spreads could significantly increase our funding costs. Other conditions and factors that could materially adversely affect our liquidity and funding include a lack of market or customer confidence in the Company or negative news about the Company or the financial services industry generally which also may result in a loss of deposits and/or negatively affect our ability to access the capital markets; our inability to sell or securitize loans or other assets; and, as described below, reductions in one or more of our credit ratings. Many of the above conditions and factors may be caused by events over which we have little or no control. While market conditions have continued to improve since the financial crisis, there can be no assurance that significant disruption and volatility in the financial markets will not occur in the future. For example, concerns over geopolitical issues, commodity and currency prices, as well as global economic conditions, may cause financial market volatility.

In addition, concerns regarding U.S. government debt levels and any associated downgrade of U.S. government debt ratings may cause uncertainty and volatility as well. A downgrade of the sovereign debt ratings of the U.S. government or the debt ratings of related institutions, agencies or instrumentalities, as well as other fiscal or political events could, in addition to causing economic and financial market disruptions, materially adversely affect the market value of the U.S. government securities that we hold, the availability of those securities as collateral for borrowing, and our ability to access capital markets on favorable terms, as well as have other material adverse effects on the operation of our business and our financial results and condition.

As noted above, we rely heavily on bank deposits for our funding and liquidity. We compete with banks and other financial services companies for deposits. If our competitors raise the rates they pay on deposits our funding costs may increase, either because we raise our rates to avoid losing deposits or because we lose deposits and must rely on more expensive sources of funding. Higher funding costs reduce our net interest margin and net interest income. Checking and savings account balances and other forms of customer deposits may decrease when customers perceive alternative investments, such as the stock market, as providing a better risk/return tradeoff. When customers move money out of bank deposits and into other investments, we may lose a relatively low cost source of funds, increasing our funding costs and negatively affecting our liquidity.

If we are unable to continue to fund our assets through customer bank deposits or access capital markets on favorable terms or if we suffer an increase in our borrowing costs or otherwise fail to manage our liquidity effectively (including on an intraday basis), our liquidity, net interest margin, financial results and condition may be materially adversely affected. As we did during the financial crisis, we may also need, or be required by our regulators, to raise additional capital through the issuance of common stock, which could dilute the ownership of existing stockholders, or reduce or even eliminate our common stock dividend to preserve capital or in order to raise additional capital.

For more information, refer to the "Risk Management – Asset/Liability Management" section in this Report.

Adverse changes in our credit ratings could have a material adverse effect on our liquidity, cash flows, financial results and condition. Our borrowing costs and ability to obtain funding are influenced by our credit ratings. Reductions in one or more of our credit ratings could adversely affect our ability to borrow funds and raise the costs of our borrowings substantially and could cause creditors and business counterparties to raise collateral requirements or take other actions that could adversely affect our ability to raise funding. Credit ratings and credit ratings agencies' outlooks are based on the ratings agencies' analysis of many quantitative and qualitative factors, such as our capital adequacy, liquidity, asset quality, business mix, the level and quality of our earnings, rating agency assumptions regarding the probability and extent of federal financial assistance or support, and other rating agency specific criteria. In addition to credit ratings, our borrowing costs are affected by various other external factors, including market volatility and concerns or perceptions about the financial services industry generally. There can be no assurance that we will maintain our credit ratings and outlooks and that credit ratings downgrades in the future would not materially affect our ability to borrow funds and borrowing costs.

Downgrades in our credit ratings also may trigger additional collateral or funding obligations which could negatively affect our liquidity, including as a result of credit-related contingent features in certain of our derivative contracts. Although a one or two notch downgrade in our current credit ratings would not be expected to trigger a material increase in our collateral or funding obligations, a more severe credit rating downgrade of our long-term and short-term credit ratings could increase our collateral or funding obligations and the effect on our liquidity could be material.

For information on our credit ratings, see the "Risk Management – Asset/Liability Management – Liquidity and

Funding – Credit Ratings" section and for information regarding additional collateral and funding obligations required of certain derivative instruments in the event our credit ratings were to fall below investment grade, see Note 16 (Derivatives) to Financial Statements in this Report.

We rely on dividends from our subsidiaries for liquidity, and federal and state law, as well as certain contractual arrangements, can limit those dividends. Wells Fargo & Company, the parent holding company (the "Parent"), is a separate and distinct legal entity from its subsidiaries. It receives substantially all of its funding and liquidity from dividends and other distributions from its subsidiaries. We generally use these dividends and distributions, among other things, to pay dividends on our common and preferred stock and interest and principal on our debt. Federal and state laws limit the amount of dividends and distributions that our bank and some of our nonbank subsidiaries, including our broker-dealer subsidiaries, may pay to the Parent. In addition, under a Support Agreement (the "Support Agreement") dated June 28, 2017 among the Parent, WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), and Wells Fargo Bank, N.A., Wells Fargo Securities, LLC, and Wells Fargo Clearing Services, LLC, each an indirect subsidiary of the Parent, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers. Also, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

For more information, refer to the "Regulation and Supervision – Dividend Restrictions" and "– Holding Company Structure" sections in our 2017 Form 10-K and to Note 3 (Cash, Loan and Dividend Restrictions) and Note 27 (Regulatory and Agency Capital Requirements) to Financial Statements in this Report.

RISKS RELATED TO FINANCIAL REGULATORY REFORM AND OTHER LEGISLATION AND REGULATIONS

Enacted legislation and regulation, including the Dodd-Frank Act, as well as future legislation and/or regulation, could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us or otherwise adversely affect our business operations and/or competitive position. Our parent company, our subsidiary banks and many of our nonbank subsidiaries such as those related to our brokerage and mutual fund businesses, are subject to significant and extensive regulation under state and federal laws in the U.S., as well as the applicable laws of the various jurisdictions outside of the U.S. where we conduct business. These regulations protect depositors, federal deposit insurance funds, consumers, investors, team members, and the banking and financial system as a whole, not necessarily our security holders. Economic, market and political conditions during the past few years have led to a significant amount of legislation and regulation in the U.S. and abroad affecting the financial services industry, as well as heightened expectations and scrutiny of financial services companies from banking regulators. These laws and regulations may affect the manner in which we do business and the products and services that we provide, affect or restrict our ability to compete in our current businesses or our ability to enter into or acquire new businesses, reduce or limit our revenue in businesses or impose additional fees, assessments or taxes on us, intensify the regulatory supervision of us and the financial services industry, and adversely affect our business operations or have other negative consequences. In addition, greater government oversight and scrutiny of financial services companies has increased our operational and compliance costs as we must continue to devote substantial resources to enhancing our procedures and controls and meeting heightened regulatory standards and expectations. Any failure to meet regulatory requirements, standards or expectations could result in fees, penalties, restrictions on our ability to engage in certain business activities, or other adverse consequences.

On July 21, 2010, the Dodd-Frank Act, the most significant financial reform legislation since the 1930s, became law. The Dodd-Frank Act, among other things, imposes significant requirements and restrictions impacting the financial services industry. The Dodd-Frank Act, including current and future rules implementing its provisions and the interpretation of those rules, could result in a loss of revenue, require us to change certain of our business practices, limit our ability to pursue certain business opportunities, increase our capital requirements and impose additional assessments and costs on us and otherwise adversely affect our business operations and have other negative consequences.

Our consumer businesses, including our mortgage, automobile, credit card and other consumer lending and non-lending businesses, are subject to numerous and, in many cases, highly complex consumer protection laws and regulations, as well as enhanced regulatory scrutiny and more and expanded regulatory examinations and/or investigations. In particular, we may be negatively affected by the activities of the Consumer Financial Protection Bureau (CFPB), which has broad rulemaking powers and supervisory authority over consumer financial products and services. Although the full impact of the CFPB on our businesses is uncertain, the CFPB's activities may increase our compliance costs and require changes in our business practices as a result of new regulations and requirements which could limit or negatively affect the products and services that we currently offer our customers. For example, the CFPB has issued a number of rules impacting residential mortgage lending practices and prepaid cards. If we fail to meet enhanced regulatory requirements and expectations with respect to our consumer businesses, we may be subject to increased costs, fines, penalties, restrictions on our business activities including the products and services we can provide, and/or harm to our reputation.

The Dodd-Frank Act's proposed prohibitions or limitations on proprietary trading and private fund investment activities, known as the "Volcker Rule," also may reduce our revenue. Final rules to implement the requirements of the Volcker Rule were issued in December 2013. Wells Fargo is also subject to enhanced compliance program requirements.

In addition, the Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives and authorized the CFTC and SEC to regulate swaps and security-based swaps, respectively. The CFTC has adopted rules applicable to our provisionally registered swap dealer, Wells Fargo Bank, N.A., that require, among other things, extensive regulatory and public reporting of swaps, central clearing and trading of swaps on exchanges or other multilateral platforms, and compliance with comprehensive internal and external business conduct standards. The SEC is expected to implement parallel rules applicable to security-based swaps. In addition, federal regulators have adopted final rules establishing margin requirements for swaps and security-based swaps not centrally cleared. All of these new rules, as well as others being considered by regulators in other jurisdictions, may negatively impact customer demand for over-the-counter derivatives and may increase our costs for engaging in swaps and other derivatives activities.

The Dodd-Frank Act also imposes changes on the ABS markets by requiring sponsors of certain ABS to hold at least a 5% ownership stake in the ABS. Federal regulatory agencies have issued final rules to implement this credit risk retention requirement, which included an exemption for, among other things, GSE mortgage backed securities. The final rules may impact our ability to issue certain ABS or otherwise participate in various securitization transactions.

Through a Deposit Insurance Fund (DIF), the FDIC insures the deposits of our banks up to prescribed limits for each depositor and funds the DIF through assessments on member insured depository institutions. In March 2016, the FDIC issued a final rule, which became effective on July 1, 2016, that imposes on insured depository institutions with $10 billion or more in assets, such as Wells Fargo, a surcharge of 4.5 cents per $100 of their assessment base, after making certain adjustments. The surcharge is in addition to the base assessments we pay and could significantly increase the overall amount of our deposit insurance assessments. The FDIC expects the surcharge to be in effect for approximately two years; however, if the DIF reserve ratio does not reach 1.35% by December 31, 2018, the final rule provides that the FDIC will impose a shortfall assessment on any bank that was subject to the surcharge.

We are also subject to various rules and regulations related to the prevention of financial crimes and combating terrorism, including the U.S. Patriot Act of 2001. These rules and regulations require us to, among other things, implement policies and procedures related to anti-money laundering, anti-bribery and corruption, fraud, compliance, suspicious activities, currency transaction reporting and due diligence on customers. Although we have policies and procedures designed to comply with these rules and regulations, to the extent they are not fully effective or do not meet heightened regulatory standards or expectations, we may be subject to fines, penalties, restrictions on certain activities, reputational harm, or other adverse consequences.

Our businesses are also subject to laws and regulations enacted by U.S. and non-U.S. regulators and governmental authorities relating to the privacy of the information of customers, team members and others. These laws and regulations, among other things, increase our compliance obligations; have a significant impact on our businesses' collection, processing, sharing, use, and retention of personal data and reporting of data breaches; and provide for significantly increased penalties for non-compliance.

In April 2016, the U.S. Department of Labor adopted a rule under the Employee Retirement Income Security Act of 1974 (ERISA) that, among other changes and subject to certain exceptions, as of the applicability date of June 9, 2017, makes anyone, including broker-dealers, providing investment advice to retirement investors a fiduciary who must act in the best interest of clients when providing investment advice for direct or indirect compensation to a retirement plan, to a plan fiduciary, participant or beneficiary, or to an investment retirement account (IRA) or IRA holder. The rule impacts the manner in which business is conducted with retirement investors and affects product offerings with respect to retirement plans and IRAs.

On November 18, 2016, the OCC revoked provisions of certain consent orders that provided Wells Fargo Bank, N.A. relief from specific requirements and limitations regarding rules, policies, and procedures for corporate activities; OCC approval of changes in directors and senior executive officers; and golden parachute payments. As a result, Wells Fargo Bank, N.A. is no longer eligible for expedited treatment for certain applications; is now required to provide prior written notice to the OCC of a change in directors and senior executive officers; and is now subject to certain regulatory limitations on golden parachute payments.

In March 2017, we announced that the OCC had downgraded our most recent Community Reinvestment Act (CRA) rating, which covers the years 2009-2012, to "Needs to Improve" due to previously issued regulatory consent orders. A "Needs to Improve" rating imposes regulatory restrictions and limitations on certain of the Company's nonbank activities, including its ability to engage in certain nonbank mergers and acquisitions or undertake new financial in nature activities, and CRA performance is taken into account by regulators in reviewing applications to establish bank branches and for approving proposed bank mergers and acquisitions. The rating also results in the loss of expedited processing of applications to undertake certain activities, and requires the Company to receive prior regulatory approval for certain activities, including to issue or prepay certain subordinated debt obligations, open or relocate bank branches, or make certain public welfare investments. In addition, a "Needs to Improve" rating could have an impact on the Company's relationships with certain states, counties, municipalities or other public agencies to the extent applicable law, regulation or policy limits, restricts or influences whether such entity may do business with a company that has a below "Satisfactory" rating.

On February 2, 2018, the Company entered into a consent order with the FRB, which requires the Company to submit to the FRB within 60 days of the date of the consent order plans to further enhance the Board's governance oversight and the Company's compliance and operational risk management. The consent order also requires third-party reviews related to the adoption and implementation of such plans by September 30, 2018. Until these third-party reviews are complete and the plans are approved and implemented to the satisfaction of the FRB, the Company's total consolidated assets will be limited to the level as of December 31, 2017, which could adversely affect our results of operations or financial condition. Compliance with this asset cap will be measured on a two-quarter daily average basis to allow for management of temporary fluctuations. Once the asset cap limitation is removed, a second third-party review must be conducted to assess the efficacy and sustainability of the improvements. The Company may be subject to further actions, including the imposition of consent orders or similar regulatory agreements or civil money penalties, by other federal regulators regarding similar issues, including the Company's risk management policies and procedures.

Other future regulatory initiatives that could significantly affect our business include proposals to reform the housing finance market in the United States. These proposals, among other things, consider winding down the GSEs and reducing or eliminating over time the role of the GSEs in guaranteeing mortgages and providing funding for mortgage loans, as well as the implementation of reforms relating to borrowers, lenders, and investors in the mortgage market, including reducing the maximum size of a loan that the GSEs can guarantee, phasing in a minimum down payment requirement for borrowers, improving underwriting standards, and increasing accountability and transparency in the securitization process. Congress also may consider the adoption of legislation to reform the mortgage financing market in an effort to assist borrowers experiencing difficulty in making mortgage payments or refinancing their mortgages. The extent and timing of any regulatory reform or the adoption of any legislation regarding the GSEs and/or the home mortgage market, as well as any effect on the Company's business and financial results, are uncertain.

Any other future legislation and/or regulation, if adopted, also could significantly change our regulatory environment and increase our cost of doing business, limit the activities we may pursue or affect the competitive balance among banks, savings associations, credit unions, and other financial services companies, and have a material adverse effect on our financial results and condition.

For more information, refer to the "Regulatory Matters" section in this Report and the "Regulation and Supervision" section in our 2017 Form 10-K.

We could be subject to more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations if regulators determine that our resolution or recovery plan is deficient. Pursuant to rules adopted by the FRB and the FDIC, Wells Fargo has prepared and filed a resolution plan, a so-called "living will," that is designed to facilitate our resolution in the event of material distress or failure. There can be no assurance that the FRB or FDIC will respond favorably to the Company's resolution plans. If the FRB or FDIC determines that our resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB or FDIC ultimately determines that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations.

We must also prepare and submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. Recovery options include the possible sale, transfer or disposal of assets, securities, loan portfolios or businesses. Our insured national bank subsidiary, Wells Fargo Bank, N.A. (the "Bank"), must also prepare and submit to the OCC a recovery plan that sets forth the Bank's plan to remain a going concern when the Bank is experiencing considerable financial or operational stress, but has not yet deteriorated to the point where liquidation or resolution is imminent. If the FRB or the OCC determines that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

Our security holders may suffer losses in a resolution of Wells Fargo, whether in a bankruptcy proceeding or under the orderly liquidation authority of the FDIC, even if creditors of our subsidiaries are paid in full. If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the "orderly liquidation authority." The orderly liquidation authority allows for the appointment of the FDIC as receiver for a systemically important financial institution that is in default or in danger of default if, among other things, the resolution of the institution under the U.S. Bankruptcy Code would have serious adverse effects on financial stability in the United States. If the FDIC is appointed as receiver for Wells Fargo & Company (the "Parent"), then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of our security holders. The FDIC's orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses, and allows the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances.

Whether under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority, Wells Fargo could be resolved using a "multiple point of entry" strategy, in which the Parent and one or more of its subsidiaries would each undergo separate resolution proceedings, or a "single point of entry" strategy, in which the Parent would likely be the only material legal entity to enter resolution proceedings. The FDIC has announced that a single point of entry strategy may be a desirable strategy under its implementation of the orderly liquidation authority, but not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible.

The strategy described in our most recent resolution plan submission is a multiple point of entry strategy; however, we have made a decision to move to a single point of entry strategy for our next resolution plan submission. We are not obligated to maintain either a single point of entry or multiple point of entry strategy, and the strategies reflected in our resolution plan submissions are not binding in the event of an actual resolution of Wells Fargo, whether conducted under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority.

To facilitate the orderly resolution of systemically important financial institutions in case of material distress or failure, federal banking regulations require that institutions, such as Wells Fargo, maintain a minimum amount of equity and unsecured debt to absorb losses and recapitalize operating subsidiaries. Federal banking regulators have also required measures to facilitate the continued operation of operating subsidiaries notwithstanding the failure of their parent companies, such as limitations on parent guarantees, and have issued guidance encouraging institutions to take legally binding measures to provide capital and liquidity resources to certain subsidiaries in order to facilitate an orderly resolution. In response to the regulators' guidance and to facilitate the orderly resolution of the Company using either a single point of entry or multiple point of entry resolution strategy, on June 28, 2017, the Parent entered into the Support Agreement with WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), and the Bank, Wells Fargo Securities, LLC ("WFS"), and Wells Fargo Clearing Services, LLC ("WFCS"), each an indirect subsidiary of the Parent. Pursuant to the Support Agreement, the Parent transferred a significant amount of its assets, including the majority of its cash, deposits, liquid securities and intercompany loans (but excluding its equity interests in its subsidiaries and certain other assets), to the IHC and will continue to transfer those types of assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank pursuant to the Support Agreement and to WFS and WFCS through repurchase facilities entered into in connection with the Support Agreement. Under the Support Agreement, the IHC will also provide funding and liquidity to the Parent through subordinated notes and a committed line of credit, which, together with the issuance of dividends, is expected to provide the Parent, during business as usual operating conditions, with the same access to cash necessary to service its debts, pay dividends, repurchase its shares, and perform its other obligations as it would have had if it had not entered into these arrangements and transferred any assets. If certain liquidity and/or capital metrics fall below defined triggers, the subordinated notes would be forgiven and the committed line of credit would terminate, which could materially and adversely impact the Parent's liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented. The Parent's and the IHC's respective obligations under the Support Agreement are secured pursuant to a related security agreement.

Any resolution of the Company will likely impose losses on shareholders, unsecured debt holders and other creditors of the Parent, while the Parent's subsidiaries may continue to operate. Creditors of some or all of our subsidiaries may receive significant or full recoveries on their claims, while the Parent's security holders could face significant or complete losses. This outcome may arise whether the Company is resolved under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority, and whether the resolution is conducted using a multiple point of entry or a single point of entry strategy. Furthermore, in a multiple point of entry or single point of entry strategy, losses at some or all of our subsidiaries could be transferred to the Parent and borne by the Parent's security holders. Moreover, if either resolution strategy proved to be unsuccessful, our security holders could face greater losses than if the strategy had not been implemented.

Bank regulations, including Basel capital and liquidity standards and FRB guidelines and rules, may require higher capital and liquidity levels, limiting our ability to pay common stock dividends, repurchase our common stock, invest in our business, or provide loans or other products and services to our customers. The Company and each of our insured depository institutions are subject to various regulatory capital adequacy requirements administered by federal banking regulators. In particular, the Company is subject to final and interim final rules issued by federal banking regulators to implement Basel III capital requirements for U.S. banking organizations. These rules are based on international guidelines for determining regulatory capital issued by the Basel Committee on Banking Supervision (BCBS). The federal banking regulators' capital rules, among other things, require on a fully phased-in basis:

- a minimum Common Equity Tier 1 (CET1) ratio of 9.0%, comprised of a 4.5% minimum requirement plus a capital conservation buffer of 2.5% and for us, as a global systemically important bank (G-SIB), a capital surcharge to be calculated annually, which is 2.0% based on our year-end 2016 data;
- a minimum tier 1 capital ratio of 10.5%, comprised of a 6.0% minimum requirement plus the capital conservation buffer of 2.5% and the G-SIB capital surcharge of 2.0%;
- a minimum total capital ratio of 12.5%, comprised of a 8.0% minimum requirement plus the capital conservation buffer of 2.5% and the G-SIB capital surcharge of 2.0%;
- a potential countercyclical buffer of up to 2.5% to be added to the minimum capital ratios, which is currently not in effect but could be imposed by regulators at their discretion if it is determined that a period of excessive credit growth is contributing to an increase in systemic risk;
- a minimum tier 1 leverage ratio of 4.0%; and
- a minimum supplementary leverage ratio (SLR) of 5.0% (comprised of a 3.0% minimum requirement plus a supplementary leverage buffer of 2.0%) for large and internationally active bank holding companies (BHCs).

We were required to comply with the final Basel III capital rules beginning January 2014, with certain provisions subject to phase-in periods. The Basel III capital rules are scheduled to be fully phased in by the end of 2021.

Because the Company has been designated as a G-SIB, we will also be subject to the FRB's rule implementing the additional capital surcharge of between 1.0-4.5% on G-SIBs. Under the rule, we must annually calculate our surcharge under two prescribed methods and use the higher of the two surcharges. The G-SIB surcharge will be phased in beginning on January 1, 2016 and become fully effective on January 1, 2019. Based on year-end 2016 data, our 2018 G-SIB surcharge is 2.0% of the Company's RWAs. However, because the G-SIB surcharge is calculated annually based on data that can differ over time, the amount of the surcharge is subject to change in future periods.

In April 2014, federal banking regulators finalized a rule that enhances the SLR requirements for BHCs, like Wells Fargo, and their insured depository institutions. The SLR consists of tier 1 capital under Basel III divided by the Company's total leverage exposure. Total leverage exposure consists of the total average on-balance sheet assets, plus off-balance sheet exposures, such as undrawn commitments and derivative exposures, less amounts permitted to be deducted from tier 1 capital. The rule, which became effective on January 1, 2018, requires a covered BHC to maintain a SLR of at least 5.0% (comprised of the 3.0% minimum requirement plus a supplementary leverage buffer of 2.0%) to avoid restrictions on capital distributions and discretionary bonus payments. The rule also requires that all of our insured depository institutions maintain a SLR of 6.0% under applicable regulatory capital adequacy guidelines.

In December 2016, the FRB finalized rules to address the amount of equity and unsecured long-term debt a U.S. G-SIB must hold to improve its resolvability and resiliency, often referred to as Total Loss Absorbing Capacity (TLAC). Under the rules, which become effective on January 1, 2019, U.S. G-SIBs will be required to have a minimum TLAC amount (consisting of CET1 capital and additional tier 1 capital issued directly by the top-tier or covered BHC plus eligible external long-term debt) equal to the greater of (i) 18% of RWAs and (ii) 7.5% of total leverage exposure (the denominator of the SLR calculation). Additionally, U.S. G-SIBs will be required to maintain (i) a TLAC buffer equal to 2.5% of RWAs plus the firm's applicable G-SIB capital surcharge calculated under method one of the G-SIB calculation plus any applicable countercyclical buffer that will be added to the 18% minimum and (ii) an external TLAC leverage buffer equal to 2.0% of total leverage exposure that will be added to the 7.5% minimum, in order to avoid restrictions on capital distributions and discretionary bonus payments. The rules will also require U.S. G-SIBs to have a minimum amount of eligible unsecured long-term debt equal to the greater of (i) 6.0% of RWAs plus the firm's applicable G-SIB capital surcharge calculated under method two of the G-SIB calculation and (ii) 4.5% of the total leverage exposure. In addition, the rules will impose certain restrictions on the operations and liabilities of the top-tier or covered BHC in order to further facilitate an orderly resolution, including prohibitions on the issuance of short-term debt to external investors and on entering into derivatives and certain other types of financial contracts with external counterparties. While the rules permit permanent grandfathering of a significant portion of otherwise ineligible long-term debt that was issued prior to December 31, 2016, long-term debt issued after that date must be fully compliant with the eligibility requirements of the rules in order to count toward the minimum TLAC amount. As a result of the rules, we will need to issue additional long-term debt to remain compliant with the requirements.

In September 2014, federal banking regulators issued a final rule that implements a quantitative liquidity requirement consistent with the liquidity coverage ratio (LCR) established by the BCBS. The rule requires banking institutions, such as Wells Fargo, to hold high-quality liquid assets, such as central bank reserves and government and corporate debt that can be converted easily and quickly into cash, in an amount equal to or greater than its projected net cash outflows during a 30-day stress period. The FRB also finalized rules imposing enhanced liquidity management standards on large BHCs such as Wells Fargo, and has finalized a rule that requires large bank holding companies to publicly disclose on a quarterly basis certain quantitative and qualitative information regarding their LCR calculations.

As part of its obligation to impose enhanced capital and risk-management standards on large financial firms pursuant to the Dodd-Frank Act, the FRB issued a final capital plan rule that requires large BHCs, including the Company, to submit annual capital plans for review and to obtain regulatory approval before making capital distributions. There can be no assurance that the FRB would respond favorably to the Company's future capital plans. The FRB has also finalized a number of regulations implementing enhanced prudential requirements for large BHCs like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, and imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. The FRB has also re-proposed, but not yet finalized, additional enhanced prudential standards that would implement single counterparty credit limits and establish remediation requirements for large BHCs experiencing financial distress. The OCC, under separate authority, has also established heightened governance and risk management standards for large national banks, such as Wells Fargo Bank, N.A.

The Basel standards and federal regulatory capital and liquidity requirements may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases, and may require us to increase our capital and/or liquidity. Any requirement that we increase our regulatory capital, regulatory capital ratios or liquidity, including as a result of business growth, acquisitions or a change in our risk profile, could require us to liquidate assets or otherwise change our business, product offerings and/or investment plans, which may negatively affect our financial results. Although not currently anticipated, proposed capital requirements and/or our regulators may require us to raise additional capital in the future. Issuing additional common stock may dilute the ownership of existing stockholders. In addition, federal banking regulations may increase our compliance costs as well as limit our ability to invest in our business or provide loans or other products and services to our customers.

For more information, refer to the "Capital Management" and "Regulatory Matters" sections in this Report and the "Regulation and Supervision" section of our 2017 Form 10-K.

FRB policies, including policies on interest rates, can significantly affect business and economic conditions and our financial results and condition. The FRB regulates the supply of money in the United States. Its policies determine in large part our cost of funds for lending and investing and the return we earn on those loans and investments, both of which affect our net interest income and net interest margin. The FRB's interest rate policies also can materially affect the value of financial instruments we hold, such as debt securities and MSRs. In addition, its policies can affect our borrowers, potentially increasing the risk that they may fail to repay their loans. Changes in FRB policies are beyond our control and can be hard to predict. The FRB recently increased the target range for the federal funds rate by 25 basis points to a target range of 125 to 150 basis points. The FRB has stated that in determining the timing and size of any future adjustments to the target range for the federal funds rate, the FRB will assess realized and expected economic conditions relative to its objectives of maximum employment and 2% inflation. As noted above, a declining or low interest rate environment and a flattening yield curve which may result from the FRB's actions could negatively affect our net interest income and net interest margin as it may result in us holding lower yielding loans and investment securities on our balance sheet.

CREDIT RISK

As one of the largest lenders in the U.S., increased credit risk, including as a result of a deterioration in economic conditions, could require us to increase our provision for credit losses and allowance for credit losses and could have a material adverse effect on our results of operations and financial condition. When we loan money or commit to loan money we incur credit risk, or the risk of losses if our borrowers do not repay their loans. As one of the largest lenders in the U.S., the credit performance of our loan portfolios significantly affects our financial results and condition. As noted above, if the current economic environment were to deteriorate, more of our customers may have difficulty in repaying their loans or other obligations which could result in a higher level of credit losses and provision for credit losses. We reserve for credit losses by establishing an allowance through a charge to earnings. The amount of this allowance is based on our assessment of credit losses inherent in our loan portfolio (including unfunded credit commitments). The process for determining the amount of the allowance is critical to our financial results and condition. It requires difficult, subjective and complex judgments about the future, including forecasts of economic or market conditions that might impair the ability of our borrowers to repay their loans. We might increase the allowance because of changing economic conditions, including falling home prices and higher unemployment, significant loan growth, or other factors. Additionally, the regulatory environment or external factors, such as natural disasters, also can influence recognition of credit losses in our loan portfolios and impact our allowance for credit losses.

Our provision for credit losses was $400 million less than net charge-offs in 2017 and $250 million more than net charge-offs in 2016, which had a positive effect on our earnings in 2017 but a negative effect in 2016. Future allowance levels may increase or decrease based on a variety of factors, including loan growth, portfolio performance and general economic conditions. While we believe that our allowance for credit losses was appropriate at December 31, 2017, there is no assurance that it will be sufficient to cover future credit losses, especially if housing and employment conditions worsen. In the event of significant deterioration in economic conditions or if we experience significant loan growth, we may be required to build reserves in future periods, which would reduce our earnings.

For more information, refer to the "Risk Management – Credit Risk Management" and "Critical Accounting Policies – Allowance for Credit Losses" sections in this Report.

We may have more credit risk and higher credit losses to the extent our loans are concentrated by loan type, industry segment, borrower type, or location of the borrower or collateral. Our credit risk and credit losses can increase if our loans are concentrated to borrowers engaged in the same or similar activities or to borrowers who individually or as a group may be uniquely or disproportionately affected by economic or market conditions. Similarly, challenging economic or market conditions affecting a particular industry or geography may also impact related or dependent industries or the ability of borrowers living in such affected areas or working in such industries to meet their financial obligations. We experienced the effect of concentration risk in 2009 and 2010 when we incurred greater than expected losses in our residential real estate loan portfolio due to a housing slowdown and greater than expected deterioration in residential real estate values in many markets, including the Central Valley California market and several Southern California metropolitan statistical areas. As California is our largest banking state in terms of loans and deposits, deterioration in real estate values and underlying economic conditions in those markets or elsewhere in California could result in materially higher credit losses. In addition, deterioration in macro-economic conditions generally across the country could result in materially higher credit losses, including for our residential real estate loan portfolio, which includes nonconforming mortgage loans we retain on our balance sheet. We may experience higher delinquencies and higher loss rates as our consumer real estate secured lines of credit reach their contractual end of draw period and begin to amortize. Additionally, we may experience higher delinquencies and higher loss rates as borrowers in our consumer Pick-a-Pay portfolio reach their recast trigger, particularly if interest rates increase significantly which may cause more borrowers to experience a payment increase of more than 7.5% upon recast.

We are currently one of the largest CRE lenders in the U.S. A deterioration in economic conditions that negatively affects the business performance of our CRE borrowers, including increases in interest rates and/or declines in commercial property values, could result in materially higher credit losses and have a material adverse effect on our financial results and condition.

Challenges and/or changes in foreign economic conditions may increase our foreign credit risk. Our foreign loan exposure represented approximately 7% of our total consolidated outstanding loans and 4% of our total assets at December 31, 2017. Economic difficulties in foreign jurisdictions could also indirectly have a material adverse effect on our credit performance and results of operations and financial condition to the extent they negatively affect the U.S. economy and/or our borrowers who have foreign operations.

For more information, refer to the "Risk Management – Credit Risk Management" section and Note 6 (Loans and Allowance for Credit Losses) to Financial Statements in this Report.

We may incur losses on loans, securities and other acquired assets of Wachovia that are materially greater than reflected in our fair value adjustments. We accounted for the Wachovia merger under the purchase method of accounting, recording the acquired assets and liabilities of Wachovia at fair value. All PCI loans acquired in the merger were recorded at fair value based on the present value of their expected cash flows. We estimated cash flows using internal credit, interest rate and prepayment risk models using assumptions about matters that are inherently uncertain. We may not realize the estimated cash flows or fair value of these loans. In addition, although the difference between the pre-merger carrying value of the credit-impaired loans and their expected cash flows – the "nonaccretable difference" – is available to absorb future charge-offs, we may be required to increase our allowance for credit losses and related provision expense because of subsequent additional credit deterioration in these loans.

For more information, refer to the "Risk Management – Credit Risk Management" section in this Report.

RISKS RELATED TO OUR MORTGAGE BUSINESS

Our mortgage banking revenue can be volatile from quarter to quarter, including from the impact of changes in interest rates on our origination activity and on the value of our MSRs, MHFS and associated economic hedges, and we rely on the GSEs to purchase our conforming loans to reduce our credit risk and provide liquidity to fund new mortgage loans. We were the largest mortgage originator and residential mortgage servicer in the U.S. as of December 31, 2017, and we earn revenue from fees we receive for originating mortgage loans and for servicing mortgage loans. As a result of our mortgage servicing business, we have a sizeable portfolio of MSRs. An MSR is the right to service a mortgage loan – collect principal, interest and escrow amounts – for a fee. We acquire MSRs when we retain the servicing rights after we sell or securitize the loans we have originated or when we purchase the servicing rights to mortgage loans originated by other lenders. We initially measure and carry all our residential MSRs using the fair value measurement method. Fair value is the present value of estimated future net servicing income, calculated based on a number of variables, including assumptions about the likelihood of prepayment by borrowers. Changes in interest rates can affect prepayment assumptions and thus fair value. When interest rates fall, borrowers are usually more likely to prepay their mortgage loans by refinancing them at a lower rate. As the likelihood of prepayment increases, the fair value of our MSRs can decrease. Each quarter we evaluate the fair value of our MSRs, and any decrease in fair value reduces earnings in the period in which the decrease occurs. We also measure at fair value MHFS for which an active secondary market and readily available market prices exist. In addition, we measure at fair value certain other interests we hold related to residential loan sales and securitizations. Similar to other interest-bearing securities, the value of these MHFS and other interests may be negatively affected by changes in interest rates. For example, if market interest rates increase relative to the yield on these MHFS and other interests, their fair value may fall.

When rates rise, the demand for mortgage loans usually tends to fall, reducing the revenue we receive from loan originations. Under the same conditions, revenue from our MSRs can increase through increases in fair value. When rates fall, mortgage originations usually tend to increase and the value of our MSRs usually tends to decline, also with some offsetting revenue effect. Even though they can act as a "natural hedge," the hedge is not perfect, either in amount or timing. For example, the negative effect on revenue from a decrease in the fair value of residential MSRs is generally immediate, but any offsetting revenue benefit from more originations and the MSRs relating to the new loans would generally accrue over time. It is also possible that, because of economic conditions and/or a weak or deteriorating housing market, even if interest rates were to fall or remain low, mortgage originations may also fall or any increase in mortgage originations may not be enough to offset the decrease in the MSRs value caused by the lower rates.

We typically use derivatives and other instruments to hedge our mortgage banking interest rate risk. We may not hedge all of our risk, and we may not be successful in hedging any of the risk. Hedging is a complex process, requiring sophisticated models and constant monitoring, and is not a perfect science. We may use hedging instruments tied to U.S. Treasury rates, LIBOR or Eurodollars that may not perfectly correlate with the value or income being hedged. We could incur significant losses from our hedging activities. There may be periods where we elect not to use derivatives and other instruments to hedge mortgage banking interest rate risk.

We rely on GSEs to purchase mortgage loans that meet their conforming loan requirements and on the Federal Housing Authority (FHA) to insure loans that meet their policy requirements. These loans are then securitized into either GSE or GNMA securities that are sold to investors. In order to meet customer needs, we also originate loans that do not conform to either GSE or FHA standards, which are referred to as "nonconforming" loans. We generally retain these nonconforming loans on our balance sheet. When we retain a loan on our balance sheet not only do we forgo fee revenue and keep the credit risk of the loan but we also do not receive any sale proceeds that could be used to generate new loans. If we were unable or unwilling to continue retaining nonconforming loans on our balance sheet, whether due to regulatory, business or other reasons, our ability to originate new nonconforming loans may be reduced, thereby reducing the interest income we earn from originating these loans. Similarly, if the GSEs or the FHA were to limit or reduce their purchases or insuring of loans, our ability to fund, and thus originate new mortgage loans, could also be reduced. We cannot assure that the GSEs or the FHA will not materially limit their purchases or insuring of conforming loans or change their criteria for what constitutes a conforming loan (e.g., maximum loan amount or borrower eligibility). Each of the GSEs is currently in conservatorship, with its primary regulator, the Federal Housing Finance Agency acting as conservator. We cannot predict if, when or how the conservatorship will end, or any associated changes to the GSEs business structure and operations that could result. As noted above, there are various proposals to reform the housing finance market in the U.S., including the role of the GSEs in the housing finance market. The impact of any such regulatory reform regarding the housing finance market and the GSEs, including whether the GSEs will continue to exist in their current form, as well as any effect on the Company's business and financial results, are uncertain.

For more information, refer to the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk" and "Critical Accounting Policies" sections in this Report.

We may be required to repurchase mortgage loans or reimburse investors and others as a result of breaches in contractual representations and warranties, and we may incur other losses as a result of real or alleged violations of statutes or regulations applicable to the origination of our residential mortgage loans. The origination of residential mortgage loans is governed by a variety of federal and state laws and regulations, including the Truth in Lending Act of 1968 and various anti-fraud and consumer protection statutes, which are complex and frequently changing. We often sell residential mortgage loans that we originate to various parties, including GSEs, SPEs that issue private label MBS, and other financial institutions that purchase mortgage loans for investment or private label securitization. We may also pool FHA-insured and VA-guaranteed mortgage loans which back securities guaranteed by GNMA. The agreements under which we sell mortgage loans and the insurance or guaranty agreements with the FHA and VA contain various representations and warranties regarding the origination and characteristics of the mortgage loans. We may be required to repurchase mortgage loans, indemnify the securitization trust, investor or insurer, or reimburse the securitization trust, investor or insurer for credit losses incurred on loans in the event of a breach of contractual representations or warranties that is not remedied within a period (usually 90 days or less) after we receive notice of the breach. We establish a mortgage repurchase liability related to the various representations and warranties that reflect management's estimate of losses for loans which we have a repurchase obligation. Our mortgage repurchase liability represents management's best estimate of the probable loss that we may expect to incur for the representations and warranties in the contractual provisions of our sales of mortgage loans. Because the level of mortgage loan repurchase losses depends upon economic factors, investor demand strategies and other external conditions that may change over the life of the underlying loans, the level of the liability for mortgage loan repurchase losses is difficult to estimate and requires considerable management judgment. As a result of the uncertainty in the various estimates underlying the mortgage repurchase liability, there is a range of losses in excess of the recorded mortgage repurchase liability that are reasonably possible. The estimate of the range of possible loss for representations and warranties does not represent a probable loss, and is based on currently available information, significant judgment, and a number of assumptions that are subject to change. If economic conditions or the housing market worsen or future investor repurchase demand and our success at appealing repurchase requests differ from past experience, we could have increased repurchase obligations and increased loss severity on repurchases, requiring significant additions to the repurchase liability.

Additionally, for residential mortgage loans that we originate, borrowers may allege that the origination of the loans did not comply with applicable laws or regulations in one or more respects and assert such violation as an affirmative defense to payment or to the exercise by us of our remedies, including foreclosure proceedings, or in an action seeking statutory and other damages in connection with such violation. If we are not successful in demonstrating that the loans in dispute were originated in accordance with applicable statutes and regulations, we could become subject to monetary damages and other civil penalties, including the loss of certain contractual payments or the inability to exercise certain remedies under the loans.

For more information, refer to the "Risk Management – Credit Risk Management – Liability for Mortgage Loan Repurchase Losses" section in this Report.

We may be terminated as a servicer or master servicer, be required to repurchase a mortgage loan or reimburse investors for credit losses on a mortgage

loan, or incur costs, liabilities, fines and other sanctions if we fail to satisfy our servicing obligations, including our obligations with respect to mortgage loan foreclosure actions and servicing flood zone properties. We act as servicer and/or master servicer for mortgage loans included in securitizations and for unsecuritized mortgage loans owned by investors. As a servicer or master servicer for those loans we have certain contractual obligations to the securitization trusts, investors or other third parties, including, in our capacity as a servicer, foreclosing on defaulted mortgage loans or, to the extent consistent with the applicable securitization or other investor agreement, considering alternatives to foreclosure such as loan modifications or short sales and, in our capacity as a master servicer, overseeing the servicing of mortgage loans by the servicer. In addition, we may have certain servicing obligations for properties that fall within a flood zone. If we commit a material breach of our obligations as servicer or master servicer, we may be subject to termination if the breach is not cured within a specified period of time following notice, which can generally be given by the securitization trustee or a specified percentage of security holders, causing us to lose servicing income. In addition, we may be required to indemnify the securitization trustee against losses from any failure by us, as a servicer or master servicer, to perform our servicing obligations or any act or omission on our part that involves willful misfeasance, bad faith or gross negligence. Furthermore, if any of the companies that insure the mortgage loans in our servicing portfolio experience financial difficulties or credit downgrades, we may incur additional costs to obtain replacement insurance coverage with another provider, possibly at a higher cost than the coverage we would replace. For certain investors and/or certain transactions, we may be contractually obligated to repurchase a mortgage loan or reimburse the investor for credit losses incurred on the loan as a remedy for servicing errors with respect to the loan. If we have increased repurchase obligations because of claims that we did not satisfy our obligations as a servicer or master servicer, or increased loss severity on such repurchases, we may have a significant reduction to net servicing income within mortgage banking noninterest income.

We may incur costs if we are required to, or if we elect to, re-execute or re-file documents or take other action in our capacity as a servicer in connection with pending or completed foreclosures. We may incur litigation costs if the validity of a foreclosure action is challenged by a borrower. If a court were to overturn a foreclosure because of errors or deficiencies in the foreclosure process, we may have liability to the borrower and/or to any title insurer of the property sold in foreclosure if the required process was not followed. We may also incur costs if we are unable to meet certain foreclosure timelines as prescribed by GSE or other government servicing guidelines. These costs and liabilities may not be legally or otherwise reimbursable to us, particularly to the extent they relate to securitized mortgage loans. In addition, if certain documents required for a foreclosure action are missing or defective, we could be obligated to cure the defect or repurchase the loan. We may incur liability to securitization investors relating to delays or deficiencies in our processing of mortgage assignments or other documents necessary to comply with state law governing foreclosures. The fair value of our MSRs may be negatively affected to the extent our servicing costs increase because of higher foreclosure or other servicing related costs. We may be subject to fines and other sanctions imposed by federal or state regulators as a result of actual or perceived deficiencies in our mortgage servicing practices, including with respect to our foreclosure practices or our servicing of flood zone properties. Any of these actions may harm our reputation, negatively affect our residential mortgage origination or servicing business, or result in material fines, penalties, equitable remedies, or other enforcement actions.

For more information, refer to the "Risk Management – Credit Risk Management – Liability for Mortgage Loan Repurchase Losses" and "– Risks Relating to Servicing Activities," and "Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights" sections and Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments) and Note 15 (Legal Actions) to Financial Statements in this Report.

OPERATIONAL AND LEGAL RISK

A failure in or breach of our operational or security systems, controls or infrastructure, or those of our third party vendors and other service providers, including as a result of cyber attacks, could disrupt our businesses, result in the disclosure or misuse of confidential or proprietary information, damage our reputation, increase our costs and cause losses. As a large financial institution that serves over 70 million customers through more than 8,300 locations, 13,000 ATMs, the internet, mobile banking and other distribution channels across the U.S. and internationally, we depend on our ability to process, record and monitor a large number of customer transactions on a continuous basis. As our customer base and locations have expanded throughout the U.S. and internationally, and as customer, public, legislative and regulatory expectations regarding operational and information security have increased, our operational systems, controls and infrastructure must continue to be safeguarded and monitored for potential failures, disruptions and breakdowns. Our business, financial, accounting, data processing systems or other operating systems and facilities may stop operating properly, become insufficient based on our evolving business needs, or become disabled or damaged as a result of a number of factors including events that are wholly or partially beyond our control. For example, there could be sudden increases in customer transaction volume; electrical or telecommunications outages; degradation or loss of internet or website availability; climate change related impacts and natural disasters such as earthquakes, tornados, and hurricanes; disease pandemics; events arising from local or larger scale political or social matters, including terrorist acts; and, as described below, cyber attacks. Furthermore, enhancements and upgrades to our infrastructure or operating systems may be time-consuming, entail significant costs, and create risks associated with implementing new systems and integrating them with existing ones. Due to the complexity and interconnectedness of our systems, the process of enhancing our infrastructure and operating systems, including their security measures, can itself create a risk of system disruptions and security issues. Although we have business continuity plans and other safeguards in place, our business operations may be adversely affected by significant and widespread disruption to our physical infrastructure or operating systems that support our businesses and customers.

Information security risks for large financial institutions such as Wells Fargo have generally increased in recent years in part because of the proliferation of new technologies, the use of the internet and telecommunications technologies to conduct financial transactions, and the increased sophistication and activities of organized crime, hackers, terrorists, activists, and other external parties, including foreign state-sponsored parties.

Those parties also may attempt to misrepresent personal or financial information to obtain loans or other financial products from us or attempt to fraudulently induce employees, customers, or other users of our systems to disclose confidential information in order to gain access to our data or that of our customers. As noted above, our operations rely on the secure processing, transmission and storage of confidential information in our computer systems and networks. Our banking, brokerage, investment advisory, and capital markets businesses rely on our digital technologies, computer and email systems, software, hardware, and networks to conduct their operations. In addition, to access our products and services, our customers may use personal smartphones, tablet PC's, and other mobile devices that are beyond our control systems. Although we believe we have robust information security procedures and controls, our technologies, systems, networks, and our customers' devices may become the target of cyber attacks or information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of Wells Fargo's or our customers' confidential, proprietary and other information, or otherwise disrupt Wells Fargo's or its customers' or other third parties' business operations. For example, various retailers have reported they were victims of cyber attacks in which large amounts of their customers' data, including debit and credit card information, was obtained. In these situations, we generally incur costs to replace compromised cards and address fraudulent transaction activity affecting our customers.

Third parties with which we do business or that facilitate our business activities, including exchanges, clearing houses, financial intermediaries or vendors that provide services or security solutions for our operations, could also be sources of operational risk and information security risk to us, including from cyber attacks, information breaches or loss, breakdowns, disruptions or failures of their own systems or infrastructure, or any deficiencies in the performance of their responsibilities. Furthermore, as a result of financial institutions and technology systems becoming more interconnected and complex, any operational or information security incident at a third party may increase the risk of loss or material impact to us or the financial industry as a whole. Moreover, because we rely on third parties to provide services to us and facilitate certain of our business activities, we face increased operational risk. If third parties we rely on do not adequately or appropriately provide their services or perform their responsibilities, or we do not effectively manage or oversee these third party relationships, we may suffer material harm, including business disruptions, losses or costs to remediate any of the deficiencies, reputational damage, legal or regulatory proceedings, or other adverse consequences.

To date we have not experienced any material losses relating to cyber attacks or other information security breaches, but there can be no assurance that we will not suffer such losses in the future. Our risk and exposure to these matters remains heightened because of, among other things, the evolving nature of these threats, the prominent size and scale of Wells Fargo and its role in the financial services industry, our plans to continue to implement our internet banking and mobile banking channel strategies and develop additional remote connectivity solutions to serve our customers when and how they want to be served, our expanded geographic footprint and international presence, the outsourcing of some of our business operations, and the current global economic and political environment. For example, Wells Fargo and other financial institutions continue to be the target of various evolving and adaptive cyber attacks, including malware and denial-of-service, as part of an effort to disrupt the operations of financial institutions, potentially test their cybersecurity capabilities, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting the infrastructure of the internet, causing the widespread unavailability of websites and degrading website performance. As a result, cybersecurity and the continued development and enhancement of our controls, processes and systems designed to protect our networks, computers, software and data from attack, damage or unauthorized access remain a priority for Wells Fargo. We are also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to cybersecurity threats. As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities or incidents.

Disruptions or failures in the physical infrastructure, controls or operating systems that support our businesses and customers, cyber attacks on us or third parties with which we do business or that facilitate our business activities, or security breaches of the networks, systems or devices that our customers use to access our products and services could result in customer attrition, financial losses, the inability of our customers to transact business with us, violations of applicable privacy and other laws, regulatory fines, penalties or intervention, litigation exposure, reputational damage, reimbursement or other compensation costs, and/or additional compliance costs, any of which could materially adversely affect our results of operations or financial condition.

Our framework for managing risks may not be fully effective in mitigating risk and loss to us. Our risk management framework seeks to mitigate risk and loss to us. We have established processes and procedures intended to identify, measure, monitor, report and analyze the types of risk to which we are subject, including liquidity risk, credit risk, market risk, interest rate risk, operational risk, legal and compliance risk, and reputational risk, among others. However, as with any risk management framework, there are inherent limitations to our risk management strategies as there may exist, or develop in the future, risks that we have not appropriately anticipated, identified or managed. Our risk management framework is also dependent on ensuring that effective operational controls and a sound culture exist throughout the Company. The inability to develop effective operational controls or to foster the appropriate culture in each of our lines of business could adversely impact the effectiveness of our risk management framework. Similarly, if we are unable to effectively manage our business or operations, we may be exposed to increased risks or unexpected losses. We are also exposed to risks if we do not accurately or completely execute a process or transaction, whether due to human error or otherwise. In certain instances, we rely on models to measure, monitor and predict risks, such as market and interest rate risks, as well as to help inform business decisions; however, there is no assurance that these models will appropriately capture all relevant risks or accurately predict future events or exposures. In addition, we rely on data to aggregate and assess our various risk exposures and business activities, and any issues with the quality or effectiveness of our data aggregation and validation procedures could result in ineffective risk management practices or business decisions or inaccurate regulatory or other risk reporting. The recent financial and credit crisis and resulting regulatory reform highlighted both the importance and some of the limitations of managing unanticipated risks, and our regulators remain focused on ensuring that financial institutions build and maintain robust risk management policies and practices. If our risk management framework proves ineffective, we could suffer unexpected losses which could materially adversely affect our results of operations or financial condition.

Risks related to sales practices and other instances where customers may have experienced financial harm. Various government entities and offices have undertaken formal or informal inquiries, investigations or examinations arising out of certain sales practices of the Company that were the subject of settlements with the Consumer Financial Protection Bureau, the Office of the Comptroller of the Currency and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016. In addition to imposing monetary penalties and other sanctions, regulatory authorities may require admissions of wrongdoing and compliance with other conditions in connection with such matters, which can lead to restrictions on our ability to engage in certain business activities or offer certain products or services, limitations on our ability to access capital markets, limitations on capital distributions, the loss of customers, and/or other direct and indirect adverse consequences. A number of lawsuits have also been filed by non-governmental parties seeking damages or other remedies related to these sales practices. The ultimate resolution of any of these pending legal proceedings or government investigations, depending on the sanctions and remedy sought and granted, could materially adversely affect our results of operations and financial condition. We may also incur additional costs and expenses in order to address and defend these pending legal proceedings and government investigations, and we may have increased compliance and other costs related to these matters. Furthermore, negative publicity or public opinion resulting from these matters may increase the risk of reputational harm to our business, which can impact our ability to keep and attract customers, affect our ability to attract and retain qualified team members, result in the loss of revenue, or have other material adverse effects on our results of operations and financial condition. In addition, the ultimate results and conclusions of our company-wide review of sales practices issues are still pending and could lead to an increase in the identified number of potentially impacted customers, additional legal or regulatory proceedings, compliance and other costs, reputational damage, the identification of issues in our practices or methodologies that were used to identify, prevent or remediate sales practices related matters, the loss of additional team members, or further changes in policies and procedures that may impact our business.

Furthermore, our priority of rebuilding trust has included an ongoing effort to identify other areas or instances where customers may have experienced financial harm. For example, as we centralize operations in our automobile lending business and tighten controls and oversight of third-party risk management, we have identified certain issues related to historical practices concerning the origination, servicing, and/or collection of consumer automobile loans, including related insurance products. The identification of such other areas or instances where customers may have experienced financial harm could lead to, and in some cases has already resulted in, additional remediation costs, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, reputational damage, or other adverse consequences.

For more information, refer to the "Overview – Sales Practices Matters" and "– Additional Efforts to Rebuild Trust" sections and Note 15 (Legal Actions) to Financial Statements in this Report.

We may incur fines, penalties and other negative consequences from regulatory violations, possibly even inadvertent or unintentional violations, or from any failure to meet regulatory standards or expectations. We maintain systems and procedures designed to ensure that we comply with applicable laws and regulations. However, we are subject to heightened compliance and regulatory oversight and expectations, particularly due to the evolving and increasing regulatory landscape we operate in. In addition, a single event or issue may give rise to numerous and overlapping investigations and proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities in different jurisdictions. Also, the laws and regulations in jurisdictions in which we operate may be different or even conflict with each other, such as differences between U.S. federal and state law or differences between U.S. and foreign laws as to the products and services we may offer or other business activities we may engage in, which can lead to compliance difficulties or issues. Furthermore, many legal and regulatory regimes require us to report transactions and other information to regulators and other governmental authorities, self-regulatory organizations, exchanges, clearing houses and customers. We are also required to withhold funds and make various tax-related payments, relating to our own tax obligations and those of our customers. We may be subject to fines, penalties, restrictions on our business, or other negative consequences if we do not timely, completely, or accurately provide regulatory reports, customer notices or disclosures, or make tax-related withholdings or payments, on behalf of ourselves or our customers. Moreover, some legal/regulatory frameworks provide for the imposition of fines or penalties for noncompliance even though the noncompliance was inadvertent or unintentional and even though there was in place at the time systems and procedures designed to ensure compliance. For example, we are subject to regulations issued by the Office of Foreign Assets Control (OFAC) that prohibit financial institutions from participating in the transfer of property belonging to the governments of certain foreign countries and designated nationals of those countries. OFAC may impose penalties or restrictions on certain activities for inadvertent or unintentional violations even if reasonable processes are in place to prevent the violations. Any violation of these or other applicable laws or regulatory requirements, even if inadvertent or unintentional, or any failure to meet regulatory standards or expectations could result in fees, penalties, restrictions on our ability to engage in certain business activities, reputational harm, loss of customers or other negative consequences.

Negative publicity, including as a result of our actual or alleged conduct or public opinion of the financial services industry generally, could damage our reputation and business. Reputation risk, or the risk to our business, earnings and capital from negative public opinion, is inherent in our business and has increased substantially because of the financial crisis, our size and profile in the financial services industry, and sales practices related matters and other instances where customers may have experienced financial harm. The reputation of the financial services industry in general has been damaged as a result of the financial crisis and other matters affecting the financial services industry, and negative public opinion about the financial services industry generally or Wells Fargo specifically could adversely affect our ability to keep and attract customers. Negative public opinion could result from our actual or alleged conduct in any number of activities, including sales practices; mortgage, automobile or other consumer lending practices; servicing and foreclosure activities; management of client accounts or investments; lending, investing or other business relationships; corporate governance; regulatory compliance; risk management; and disclosure, sharing or inadequate protection of customer information, and from actions taken by government regulators and community or other organizations in response to that conduct. Although we have policies and procedures in place intended to detect and prevent conduct by team members and third party service providers that could potentially harm customers or our reputation, there is no assurance that such policies and procedures will be fully effective in preventing such conduct. Furthermore, our actual or perceived failure to address or prevent any such conduct or otherwise to effectively manage our business or operations could result in significant reputational harm. In addition, because we conduct most of our businesses under the "Wells Fargo" brand, negative public opinion about one business also could affect our other businesses. The proliferation of social media websites utilized by Wells Fargo and other third parties, as well as the personal use of social media by our team members and others, including personal blogs and social network profiles, also may increase the risk that negative, inappropriate or unauthorized information may be posted or released publicly that could harm our reputation or have other negative consequences, including as a result of our team members interacting with our customers in an unauthorized manner in various social media outlets.

Wells Fargo and other financial institutions have been targeted from time to time by protests and demonstrations, which have included disrupting the operation of our retail banking locations and have resulted in negative public commentary about financial institutions, including the fees charged for various products and services. There can be no assurance that continued protests or negative publicity for the Company specifically or large financial institutions generally will not harm our reputation and adversely affect our business and financial results.

Risks related to legal actions. Wells Fargo and some of its subsidiaries are involved in judicial, regulatory, arbitration, and other proceedings or investigations concerning matters arising from the conduct of our business activities. Although we believe we have a meritorious defense in all significant legal actions pending against us, there can be no assurance as to the ultimate outcome. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. We may still incur costs for a legal action even if we have not established an accrual. In addition, the actual cost of resolving a legal action may be substantially higher than any amounts accrued for that action. The ultimate resolution of a pending legal proceeding or investigation, depending on the remedy sought and granted, could materially adversely affect our results of operations and financial condition.

As noted above, we are subject to heightened regulatory oversight and scrutiny, which may lead to regulatory investigations, proceedings or enforcement actions. In addition to imposing monetary penalties and other sanctions, regulatory authorities may require criminal pleas or other admissions of wrongdoing and compliance with other conditions in connection with settling such matters, which can lead to reputational harm, loss of customers, restrictions on the ability to access capital markets, limitations on capital distributions, the inability to engage in certain business activities or offer certain products or services, and/or other direct and indirect adverse effects.

For more information, refer to Note 15 (Legal Actions) to Financial Statements in this Report.

RISKS RELATED TO OUR INDUSTRY'S COMPETITIVE OPERATING ENVIRONMENT

We face significant and increasing competition in the rapidly evolving financial services industry. We compete with other financial institutions in a highly competitive industry that is undergoing significant changes as a result of financial regulatory reform, technological advances, increased public scrutiny stemming from the financial crisis and continued challenging economic conditions. Our success depends on our ability to develop and maintain deep and enduring relationships with our customers based on the quality of our customer service, the wide variety of products and services that we can offer our customers and the ability of those products and services to satisfy our customers' needs, the pricing of our products and services, the extensive distribution channels available for our customers, our innovation, and our reputation. Continued or increased competition in any one or all of these areas may negatively affect our customer relationships, market share and results of operations and/or cause us to increase our capital investment in our businesses in order to remain competitive. In addition, our ability to reposition or reprice our products and services from time to time may be limited and could be influenced significantly by the current economic, regulatory and political environment for large financial institutions as well as by the actions of our competitors. Furthermore, any changes in the types of products and services that we offer our customers and/or the pricing for those products and services could result in a loss of customer relationships and market share and could materially adversely affect our results of operations.

Continued technological advances and the growth of e-commerce have made it possible for non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities trading, lending and payment solutions. We may not respond effectively to these and other competitive threats from existing and new competitors and may be forced to sell products at lower prices, increase our investment in our business to modify or adapt our existing products and services, and/or develop new products and services to respond to our customers' needs. To the extent we are not successful in developing and introducing new products and services or responding or adapting to the competitive landscape or to changes in customer preferences, we may lose customer relationships and our revenue growth and results of operations may be materially adversely affected.

Our ability to attract and retain qualified team members is critical to the success of our business and failure to do so could adversely affect our business performance, competitive position and future prospects. The success of Wells Fargo is heavily dependent on the talents and efforts of our team members, including our senior leaders, and in many areas of our business, including commercial banking, brokerage, investment advisory, capital markets, risk management and technology, the competition for highly qualified personnel is intense. We also seek to retain a pipeline of team members to provide continuity of succession for our senior leadership positions. In order to attract and retain highly qualified team members, we must provide competitive compensation. As a large financial institution and additionally to the extent we remain subject to consent orders we may be subject to limitations on compensation by our regulators that may adversely affect our ability to attract and retain these qualified team members, especially if some of our competitors may not be subject to these same compensation limitations. If we are unable to continue to attract and retain qualified team members, including successors for senior leadership positions, our business performance, competitive position and future prospects may be adversely affected.

RISKS RELATED TO OUR FINANCIAL STATEMENTS

Changes in accounting policies or accounting standards, and changes in how accounting standards are interpreted or applied, could materially affect how we report our financial results and condition. Our accounting policies are fundamental to determining and understanding our financial results and condition. As described below, some of these policies require use of estimates and assumptions that may affect the value of our assets or liabilities and financial results. Any changes in our accounting policies could materially affect our financial statements.

From time to time the FASB and the SEC change the financial accounting and reporting standards that govern the preparation of our external financial statements. For example, Accounting Standards Update 2016-13 - *Financial Instruments-Credit Losses* (Topic 326), which becomes effective in first quarter 2020, will replace the current "incurred loss" model for the allowance for credit losses with an "expected loss" model referred to as the Current Expected Credit Loss model, or CECL. CECL could materially affect how we determine our allowance and report our financial results and condition.

In addition, accounting standard setters and those who interpret the accounting standards (such as the FASB, SEC, banking regulators and our outside auditors) may change or even reverse their previous interpretations or positions on how these standards should be applied. Changes in financial accounting and reporting standards and changes in current interpretations may be beyond our control, can be hard to predict and could materially affect how we report our financial results and condition. We may be required to apply a new or revised standard retroactively or apply an existing standard differently, also retroactively, in each case potentially resulting in our restating prior period financial statements in material amounts.

For more information, refer to the "Current Accounting Developments" section in this Report.

Our financial statements are based in part on assumptions and estimates which, if wrong, could cause unexpected losses in the future, and our financial statements depend on our internal controls over financial reporting. Pursuant to U.S. GAAP, we are required to use certain assumptions and estimates in preparing our financial statements, including in determining credit loss reserves, reserves for mortgage repurchases, reserves related to litigation and the fair value of certain assets and liabilities, among other items. Several of our accounting policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. For a description of these policies, refer to the "Critical Accounting Policies" section in this Report. If assumptions or estimates underlying our financial statements are incorrect, we may experience material losses.

Certain of our financial instruments, including trading assets, derivative assets and liabilities, investment securities, certain loans, MSRs, private equity investments, structured notes and certain repurchase and resale agreements, among other items, require a determination of their fair value in order to prepare our financial statements. Where quoted market prices are not available, we may make fair value determinations based on internally developed models or other means which ultimately rely to some degree on management judgment, and there is no assurance that our models will capture or appropriately reflect all relevant inputs required to accurately determine fair value. Some of these and other assets and liabilities may have no direct observable price levels, making their valuation particularly subjective, being based on significant estimation and judgment. In addition, sudden illiquidity in markets or declines in prices of certain loans and securities may make it more difficult to value certain balance sheet items, which may lead to the possibility that such valuations will be subject to further change or adjustment and could lead to declines in our earnings.

The Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) requires our management to evaluate the Company's disclosure controls and procedures and its internal control over financial reporting and requires our auditors to issue a report on our internal control over financial reporting. We are required to disclose, in our annual report on Form 10-K, the existence of any "material weaknesses" in our internal controls. We cannot assure that we will not identify one or more material weaknesses as of the end of any given quarter or year, nor can we predict the effect on our stock price of disclosure of a material weakness. Sarbanes-Oxley also limits the types of non-audit services our outside auditors may provide to us in order to preserve their independence from us. If our auditors were found not to be "independent" of us under SEC rules, we could be required to engage new auditors and re-file financial statements and audit reports with the SEC. We could be out of compliance with SEC rules until new financial statements and audit reports were filed, limiting our ability to raise capital and resulting in other adverse consequences.

RISKS RELATED TO ACQUISITIONS

Acquisitions may require regulatory approvals and conditions, and we may experience difficulty integrating any acquired company or business. We regularly explore opportunities to expand our products, services and assets by acquiring companies or businesses in the financial services industry. We generally must receive federal regulatory approvals before we can acquire a bank, bank holding company or certain other financial services businesses depending on the size of the financial services business to be acquired. As a result of the Dodd-Frank Act and concerns regarding the large size of financial institutions such as Wells Fargo, the regulatory process for approving acquisitions has become more complex and regulatory approvals may be more difficult to obtain. We cannot be certain when or if, or on what terms and conditions, any required regulatory approvals will be granted. We might be required to sell banks, branches and/or business units or assets or issue additional equity as a condition to receiving regulatory approval for an acquisition. When we do announce an acquisition, our stock price may fall depending on the size of the acquisition, the type of business to be acquired, the purchase price, and the potential dilution to existing stockholders or our earnings per share if we issue common stock in connection with the acquisition.

Difficulty in integrating an acquired company or business may cause us not to realize expected revenue increases, cost savings, increases in geographic or product presence, and other projected benefits from the acquisition. The integration could result in higher than expected deposit attrition, loss of key team members, an increase in our compliance costs or risk profile, disruption of our business or the acquired business, or otherwise harm our ability to retain customers and team members or achieve the anticipated benefits of the acquisition. Time and resources spent on integration may also impair our ability to grow our existing businesses. Also, the negative effect of any divestitures required by regulatory authorities in acquisitions or business combinations may be greater than expected. Many of the foregoing risks may be increased if the acquired company or business operates internationally or in a geographic location where we do not already have significant business operations and/or team members.

* * *

Any factor described in this Report or in any of our other SEC filings could by itself, or together with other factors, adversely affect our financial results and condition. Refer to our quarterly reports on Form 10-Q filed with the SEC in 2018 for material changes to the above discussion of risk factors. There are factors not discussed above or elsewhere in this Report that could adversely affect our financial results and condition.

Controls and Procedures

Disclosure Controls and Procedures

The Company's management evaluated the effectiveness, as of December 31, 2017, of the Company's disclosure controls and procedures. The Company's chief executive officer and chief financial officer participated in the evaluation. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2017.

Internal Control Over Financial Reporting

Internal control over financial reporting is defined in Rule 13a-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles (GAAP) and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; 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 the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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. No change occurred during any quarter in 2017 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Management's report on internal control over financial reporting is set forth below and should be read with these limitations in mind.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control – Integrated Framework (2013)*. Based on this assessment, management concluded that as of December 31, 2017, the Company's internal control over financial reporting was effective.

KPMG LLP, the independent registered public accounting firm that audited the Company's financial statements included in this Annual Report, issued an audit report on the Company's internal control over financial reporting. KPMG's audit report appears on the following page.

Report of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on Internal Control Over Financial Reporting

We have audited Wells Fargo & Company and Subsidiaries' (the Company) internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the "consolidated financial statements"), and our report dated March 1, 2018, 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 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

San Francisco, California
March 1, 2018

Financial Statements

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Income

		Year ended December 31,	
(in millions, except per share amounts)	**2017**	2016	2015
Interest income			
Trading assets	**$ 2,928**	2,506	1,971
Investment securities	**10,664**	9,248	8,937
Mortgages held for sale	**786**	784	785
Loans held for sale	**12**	9	19
Loans	**41,388**	39,505	36,575
Other interest income	**3,131**	1,611	990
Total interest income	**58,909**	53,663	49,277
Interest expense			
Deposits	**3,013**	1,395	963
Short-term borrowings	**758**	330	64
Long-term debt	**5,157**	3,830	2,592
Other interest expense	**424**	354	357
Total interest expense	**9,352**	5,909	3,976
Net interest income	**49,557**	47,754	45,301
Provision for credit losses	**2,528**	3,770	2,442
Net interest income after provision for credit losses	**47,029**	43,984	42,859
Noninterest income			
Service charges on deposit accounts	**5,111**	5,372	5,168
Trust and investment fees	**14,495**	14,243	14,468
Card fees	**3,960**	3,936	3,720
Other fees	**3,557**	3,727	4,324
Mortgage banking	**4,350**	6,096	6,501
Insurance	**1,049**	1,268	1,694
Net gains from trading activities	**1,053**	834	614
Net gains on debt securities (1)	**479**	942	952
Net gains from equity investments (2)	**1,268**	879	2,230
Lease income	**1,907**	1,927	621
Other	**1,603**	1,289	464
Total noninterest income	**38,832**	40,513	40,756
Noninterest expense			
Salaries	**17,363**	16,552	15,883
Commission and incentive compensation	**10,442**	10,247	10,352
Employee benefits	**5,566**	5,094	4,446
Equipment	**2,237**	2,154	2,063
Net occupancy	**2,849**	2,855	2,886
Core deposit and other intangibles	**1,152**	1,192	1,246
FDIC and other deposit assessments	**1,287**	1,168	973
Other	**17,588**	13,115	12,125
Total noninterest expense	**58,484**	52,377	49,974
Income before income tax expense	**27,377**	32,120	33,641
Income tax expense	**4,917**	10,075	10,365
Net income before noncontrolling interests	**22,460**	22,045	23,276
Less: Net income from noncontrolling interests	**277**	107	382
Wells Fargo net income	**$ 22,183**	21,938	22,894
Less: Preferred stock dividends and other	**1,629**	1,565	1,424
Wells Fargo net income applicable to common stock	**$ 20,554**	20,373	21,470
Per share information			
Earnings per common share	**$ 4.14**	4.03	4.18
Diluted earnings per common share	**4.10**	3.99	4.12
Dividends declared per common share	**1.540**	1.515	1.475
Average common shares outstanding	**4,964.6**	5,052.8	5,136.5
Diluted average common shares outstanding	**5,017.3**	5,108.3	5,209.8

(1) Total other-than-temporary impairment (OTTI) losses were $205 million, $207 million and $136 million for the years ended December 31, 2017, 2016 and 2015, respectively. Of total OTTI, losses of $262 million, $189 million and $183 million were recognized in earnings, and losses (reversal of losses) of $(57) million, $18 million and $(47) million were recognized as non-credit-related OTTI in other comprehensive income for the years ended December 31, 2017, 2016 and 2015, respectively.
(2) Includes OTTI losses of $344 million, $453 million and $376 million for the years ended December 31, 2017, 2016 and 2015, respectively.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Comprehensive Income

		Year ended December 31,	
(in millions)	**2017**	2016	2015
Wells Fargo net income	**$ 22,183**	21,938	22,894
Other comprehensive income (loss), before tax:			
Investment securities:			
Net unrealized gains (losses) arising during the period	**2,719**	(3,458)	(3,318)
Reclassification of net gains to net income	**(737)**	(1,240)	(1,530)
Derivatives and hedging activities:			
Net unrealized gains (losses) arising during the period	**(540)**	177	1,549
Reclassification of net gains on cash flow hedges to net income	**(543)**	(1,029)	(1,089)
Defined benefit plans adjustments:			
Net actuarial and prior service gains (losses) arising during the period	**49**	(52)	(512)
Amortization of net actuarial loss, settlements and other to net income	**153**	158	114
Foreign currency translation adjustments:			
Net unrealized gains (losses) arising during the period	**96**	(3)	(137)
Reclassification of net gains to net income	**—**	—	(5)
Other comprehensive income (loss), before tax	**1,197**	(5,447)	(4,928)
Income tax (expense) benefit related to other comprehensive income	**(434)**	1,996	1,774
Other comprehensive income (loss), net of tax	**763**	(3,451)	(3,154)
Less: Other comprehensive income (loss) from noncontrolling interests	**(62)**	(17)	67
Wells Fargo other comprehensive income (loss), net of tax	**825**	(3,434)	(3,221)
Wells Fargo comprehensive income	**23,008**	18,504	19,673
Comprehensive income from noncontrolling interests	**215**	90	449
Total comprehensive income	**$ 23,223**	18,594	20,122

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Balance Sheet

(in millions, except shares)		Dec 31, 2017	Dec 31, 2016
Assets			
Cash and due from banks	$	**23,367**	20,729
Federal funds sold, securities purchased under resale agreements and other short-term investments		**272,605**	266,038
Trading assets		**92,329**	74,397
Investment securities:			
Available-for-sale, at fair value		**277,085**	308,364
Held-to-maturity, at cost (fair value $138,985 and $99,155)		**139,335**	99,583
Mortgages held for sale (includes $16,116 and $22,042 carried at fair value) (1)		**20,070**	26,309
Loans held for sale		**108**	80
Loans (includes $376 and $758 carried at fair value) (1)		**956,770**	967,604
Allowance for loan losses		**(11,004)**	(11,419)
Net loans		**945,766**	956,185
Mortgage servicing rights:			
Measured at fair value		**13,625**	12,959
Amortized		**1,424**	1,406
Premises and equipment, net		**8,847**	8,333
Goodwill		**26,587**	26,693
Derivative assets		**12,228**	14,498
Other assets (includes $4,867 and $3,275 carried at fair value) (1)		**118,381**	114,541
Total assets (2)	$	**1,951,757**	1,930,115
Liabilities			
Noninterest-bearing deposits	$	**373,722**	375,967
Interest-bearing deposits		**962,269**	930,112
Total deposits		**1,335,991**	1,306,079
Short-term borrowings		**103,256**	96,781
Derivative liabilities		**8,796**	14,492
Accrued expenses and other liabilities		**70,615**	57,189
Long-term debt		**225,020**	255,077
Total liabilities (3)		**1,743,678**	1,729,618
Equity			
Wells Fargo stockholders' equity:			
Preferred stock		**25,358**	24,551
Common stock – $1-2/3 par value, authorized 9,000,000,000 shares; issued 5,481,811,474 shares		**9,136**	9,136
Additional paid-in capital		**60,893**	60,234
Retained earnings		**145,263**	133,075
Cumulative other comprehensive income (loss)		**(2,144)**	(3,137)
Treasury stock – 590,194,846 shares and 465,702,148 shares		**(29,892)**	(22,713)
Unearned ESOP shares		**(1,678)**	(1,565)
Total Wells Fargo stockholders' equity		**206,936**	199,581
Noncontrolling interests		**1,143**	916
Total equity		**208,079**	200,497
Total liabilities and equity	$	**1,951,757**	1,930,115

(1) Parenthetical amounts represent assets and liabilities for which we have elected the fair value option.
(2) Our consolidated assets at December 31, 2017 and 2016, include the following assets of certain variable interest entities (VIEs) that can only be used to settle the liabilities of those VIEs: Cash and due from banks, $116 million and $168 million; Federal funds sold, securities purchased under resale agreements and other short-term investments, $376 million and $74 million; Trading assets, $294 million and $130 million; Investment securities, $0 million and $0 million; Net loans, $12.5 billion and $12.6 billion; Derivative assets, $0 million and $1 million; Other assets, $349 million and $452 million; and Total assets, $13.6 billion and $13.4 billion, respectively.
(3) Our consolidated liabilities at December 31, 2017 and 2016, include the following VIE liabilities for which the VIE creditors do not have recourse to Wells Fargo: Derivative liabilities, $5 million and $33 million; Accrued expenses and other liabilities, $132 million and $107 million; Long-term debt, $1.5 billion and $3.7 billion; and Total liabilities, $1.6 billion and $3.8 billion, respectively.

The accompanying notes are an integral part of these statements.

Consolidated Statement of Changes in Equity

	Preferred stock		Common stock	
(in millions, except shares)	*Shares*	Amount	*Shares*	Amount
Balance December 31, 2014	*11,138,818*	$ 19,213	*5,170,349,198*	$ 9,136
Balance January 1, 2015	*11,138,818*	19,213	*5,170,349,198*	9,136
Net income				
Other comprehensive income (loss), net of tax				
Noncontrolling interests				
Common stock issued			*69,876,577*	
Common stock repurchased (1)			*(163,400,892)*	
Preferred stock issued to ESOP	*826,598*	826		
Preferred stock released by ESOP				
Preferred stock converted to common shares	*(825,499)*	(825)	*15,303,927*	
Common stock warrants repurchased/exercised				
Preferred stock issued	*120,000*	3,000		
Common stock dividends				
Preferred stock dividends				
Tax benefit from stock incentive compensation				
Stock incentive compensation expense				
Net change in deferred compensation and related plans				
Net change	*121,099*	3,001	*(78,220,388)*	—
Balance December 31, 2015	*11,259,917*	$ 22,214	*5,092,128,810*	$ 9,136
Balance Cumulative effect from change in consolidation accounting (2)				
Balance January 1, 2016	*11,259,917*	22,214	*5,092,128,810*	9,136
Net income				
Other comprehensive income (loss), net of tax				
Noncontrolling interests				
Common stock issued			*63,441,805*	
Common stock repurchased (1)			*(159,647,152)*	
Preferred stock issued to ESOP	*1,150,000*	1,150		
Preferred stock released by ESOP				
Preferred stock converted to common shares	*(963,205)*	(963)	*20,185,863*	
Common stock warrants repurchased/exercised				
Preferred stock issued	*86,000*	2,150		
Common stock dividends				
Preferred stock dividends				
Tax benefit from stock incentive compensation				
Stock incentive compensation expense				
Net change in deferred compensation and related plans				
Net change	*272,795*	2,337	*(76,019,484)*	—
Balance December 31, 2016	*11,532,712*	$ 24,551	*5,016,109,326*	$ 9,136

(1) For the year ended December 31, 2015, includes $500 million related to a private forward repurchase transaction entered into in fourth quarter 2015 that settled in first quarter 2016 for 9.2 million shares of common stock. For the year ended December 31, 2016, includes $750 million related to a private forward repurchase transaction that settled in first quarter 2017 for 14.7 million shares of common stock. See Note 1 (Summary of Significant Accounting Policies) for additional information.

(2) Effective January 1, 2016, we adopted changes in consolidation accounting pursuant to Accounting Standards Update (ASU) 2015-02: *Amendments to the Consolidation Analysis*. Accordingly, we recorded a $121 million net increase to beginning noncontrolling interests as a cumulative-effect adjustment.

The accompanying notes are an integral part of these statements.

(continued on following pages)

Wells Fargo stockholders' equity							
Additional paid-in capital	Retained earnings	Cumulative other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Total Wells Fargo stockholders' equity	Noncontrolling interests	Total equity
60,537	107,040	3,518	(13,690)	(1,360)	184,394	868	185,262
60,537	107,040	3,518	(13,690)	(1,360)	184,394	868	185,262
	22,894				22,894	382	23,276
		(3,221)			(3,221)	67	(3,154)
2					2	(424)	(422)
(397)	—		3,041		2,644		2,644
250			(8,947)		(8,697)		(8,697)
74				(900)	—		—
(73)				898	825		825
107			718		—		—
(49)					(49)		(49)
(28)					2,972		2,972
62	(7,642)				(7,580)		(7,580)
	(1,426)				(1,426)		(1,426)
453					453		453
844					844		844
(1,068)			11		(1,057)		(1,057)
177	13,826	(3,221)	(5,177)	(2)	8,604	25	8,629
60,714	120,866	297	(18,867)	(1,362)	192,998	893	193,891
						121	121
60,714	120,866	297	(18,867)	(1,362)	192,998	1,014	194,012
	21,938				21,938	107	22,045
		(3,434)			(3,434)	(17)	(3,451)
2					2	(188)	(186)
(203)	(451)		3,040		2,386		2,386
(250)			(7,866)		(8,116)		(8,116)
99				(1,249)	—		—
(83)				1,046	963		963
(11)			974		—		—
(17)					(17)		(17)
(49)					2,101		2,101
51	(7,712)				(7,661)		(7,661)
	(1,566)				(1,566)		(1,566)
277					277		277
779					779		779
(1,075)			6		(1,069)		(1,069)
(480)	12,209	(3,434)	(3,846)	(203)	6,583	(98)	6,485
60,234	133,075	(3,137)	(22,713)	(1,565)	199,581	916	200,497

(continued from previous pages)

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Changes in Equity

	Preferred stock		Common stock	
(in millions, except shares)	*Shares*	Amount	*Shares*	Amount
Balance December 31, 2016	***11,532,712***	**$ 24,551**	***5,016,109,326***	**$ 9,136**
Cumulative effect from change in hedge accounting (1)				
Balance January 1, 2017	***11,532,712***	**24,551**	***5,016,109,326***	**9,136**
Net income				
Other comprehensive income (loss), net of tax				
Noncontrolling interests				
Common stock issued			***57,257,564***	
Common stock repurchased			***(196,519,707)***	
Preferred stock issued to ESOP	***950,000***	**950**		
Preferred stock released by ESOP				
Preferred stock converted to common shares	***(833,077)***	**(833)**	***14,769,445***	
Common stock warrants repurchased/exercised				
Preferred stock issued	***27,600***	**690**		
Common stock dividends				
Preferred stock dividends				
Tax benefit from stock incentive compensation (2)				
Stock incentive compensation expense				
Net change in deferred compensation and related plans				
Net change	***144,523***	**807**	***(124,492,698)***	**—**
Balance December 31, 2017	***11,677,235***	**$ 25,358**	***4,891,616,628***	**$ 9,136**

(1) Financial information has been revised to reflect the impact of the adoption in fourth quarter 2017 of Accounting Standards Update (ASU) 2017-12 – Derivatives and Hedging (Topic 815): *Targeted Improvements to Accounting for Hedging Activities*. See Note 1 (Summary of Significant Accounting Policies) for more information.
(2) Effective January 1, 2017, we adopted Accounting Standards Update 2016-09 (*Improvements to Employee Share-Based Payment Accounting).* Accordingly, tax benefit from stock incentive compensation is reported in income tax expense in the consolidated statement of income.

The accompanying notes are an integral part of these statements.

Wells Fargo stockholders' equity							
Additional paid-in capital	Retained earnings	Cumulative other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Total Wells Fargo stockholders' equity	Noncontrolling interests	Total equity
60,234	**133,075**	**(3,137)**	**(22,713)**	**(1,565)**	**199,581**	**916**	**200,497**
	(381)	**168**			**(213)**		**(213)**
60,234	**132,694**	**(2,969)**	**(22,713)**	**(1,565)**	**199,368**	**916**	**200,284**
	22,183				**22,183**	**277**	**22,460**
		825			**825**	**(62)**	**763**
—					**—**	**12**	**12**
(133)	**(277)**		**2,758**		**2,348**		**2,348**
750			**(10,658)**		**(9,908)**		**(9,908)**
31				**(981)**	**—**		**—**
(35)				**868**	**833**		**833**
97			**736**		**—**		**—**
(133)					**(133)**		**(133)**
(13)					**677**		**677**
50	**(7,708)**				**(7,658)**		**(7,658)**
	(1,629)				**(1,629)**		**(1,629)**
—					**—**		**—**
875					**875**		**875**
(830)			**(15)**		**(845)**		**(845)**
659	**12,569**	**825**	**(7,179)**	**(113)**	**7,568**	**227**	**7,795**
60,893	**145,263**	**(2,144)**	**(29,892)**	**(1,678)**	**206,936**	**1,143**	**208,079**

Consolidated Statement of Cash Flows

		Year ended December 31,	
(in millions)	2017	2016	2015
Cash flows from operating activities:			
Net income before noncontrolling interests	$ 22,460	22,045	23,276
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	2,528	3,770	2,442
Changes in fair value of MSRs, MHFS and LHFS carried at fair value	886	139	62
Depreciation, amortization and accretion	5,406	4,970	3,288
Other net gains	(973)	(6,086)	(6,496)
Stock-based compensation	2,046	1,945	1,958
Originations and purchases of MHFS and LHFS	(181,321)	(205,314)	(178,294)
Proceeds from sales of and paydowns on mortgages originated for sale and LHFS	135,054	127,488	133,201
Net change in:			
Trading assets	33,332	62,550	42,754
Deferred income taxes	666	1,793	(2,265)
Derivative assets and liabilities	(5,025)	2,089	(354)
Other assets	(1,174)	(14,232)	(2,165)
Other accrued expenses and liabilities (1)	4,837	(211)	(1,503)
Net cash provided by operating activities	18,722	946	15,904
Cash flows from investing activities:			
Net change in:			
Federal funds sold, securities purchased under resale agreements and other short-term investments	(13,490)	3,991	(11,866)
Available-for-sale securities:			
Sales proceeds	42,714	31,584	25,431
Prepayments and maturities	45,710	41,105	33,912
Purchases	(103,671)	(120,980)	(79,778)
Held-to-maturity securities:			
Paydowns and maturities	10,673	7,957	5,290
Purchases	—	(23,593)	(25,424)
Nonmarketable equity investments:			
Sales proceeds	3,982	1,975	3,496
Purchases	(3,023)	(4,316)	(2,352)
Loans:			
Loans originated by banking subsidiaries, net of principal collected (2)	317	(39,002)	(57,020)
Proceeds from sales (including participations) of loans held for investment	10,439	10,061	11,672
Purchases (including participations) of loans	(3,702)	(6,221)	(13,759)
Principal collected on nonbank entities' loans (2)	7,448	6,844	5,023
Loans originated by nonbank entities (2)	(6,814)	(7,743)	(7,437)
Net cash paid for acquisitions	(320)	(30,584)	(3)
Proceeds from sales of foreclosed assets and short sales	5,198	7,311	7,803
Other, net	(625)	(508)	(2,223)
Net cash used by investing activities	(5,164)	(122,119)	(107,235)
Cash flows from financing activities:			
Net change in:			
Deposits	29,912	82,767	54,867
Short-term borrowings	14,020	(1,198)	34,010
Long-term debt:			
Proceeds from issuance	43,575	90,111	43,030
Repayment	(80,802)	(34,462)	(27,333)
Preferred stock:			
Proceeds from issuance	677	2,101	2,972
Cash dividends paid	(1,629)	(1,566)	(1,426)
Common stock:			
Proceeds from issuance	1,211	1,415	1,726
Stock tendered for payment of withholding taxes (1)	(393)	(494)	(679)
Repurchased	(9,908)	(8,116)	(8,697)
Cash dividends paid	(7,480)	(7,472)	(7,400)
Net change in noncontrolling interests	30	(188)	(232)
Other, net	(133)	(107)	33
Net cash provided (used) by financing activities	(10,920)	122,791	90,871
Net change in cash and due from banks	2,638	1,618	(460)
Cash and due from banks at beginning of year	20,729	19,111	19,571
Cash and due from banks at end of year	$ 23,367	20,729	19,111
Supplemental cash flow disclosures:			
Cash paid for interest	$ 9,103	5,573	3,816
Cash paid for income taxes	6,592	8,446	13,688

(1) Prior periods have been revised to conform to the current period presentation.
(2) Prior periods have been revised to reflect classification changes due to entity restructuring activities.

The accompanying notes are an integral part of these statements. See Note 1 (Summary of Significant Accounting Policies) for noncash activities.

Notes to Financial Statements

See the Glossary of Acronyms at the end of this Report for terms used throughout the Financial Statements and related Notes.

Note 1: Summary of Significant Accounting Policies

Wells Fargo & Company is a diversified financial services company. We provide banking, trust and investments, mortgage banking, investment banking, retail banking, brokerage, and consumer and commercial finance through banking locations, the internet and other distribution channels to consumers, businesses and institutions in all 50 states, the District of Columbia, and in foreign countries. When we refer to "Wells Fargo," "the Company," "we," "our" or "us," we mean Wells Fargo & Company and Subsidiaries (consolidated). Wells Fargo & Company (the Parent) is a financial holding company and a bank holding company. We also hold a majority interest in a real estate investment trust, which has publicly traded preferred stock outstanding.

Our accounting and reporting policies conform with U.S. generally accepted accounting principles (GAAP) and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates based on assumptions about future economic and market conditions (for example, unemployment, market liquidity, real estate prices, etc.) that affect the reported amounts of assets and liabilities at the date of the financial statements, income and expenses during the reporting period and the related disclosures. Although our estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition. Management has made significant estimates in several areas, including:

- allowance for credit losses (Note 6 (Loans and Allowance for Credit Losses));
- valuations of residential mortgage servicing rights (MSRs) (Note 8 (Securitizations and Variable Interest Entities) and Note 9 (Mortgage Banking Activities)) and financial instruments (Note 17 (Fair Values of Assets and Liabilities));
- income taxes (Note 22 (Income Taxes)); and
- liabilities for contingent litigation losses (Note 15 (Legal Actions)).

Actual results could differ from those estimates.

Accounting Standards Adopted in 2017

In 2017, we adopted the following new accounting guidance:

- Accounting Standards Update (ASU or Update) 2017-12 – *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities;*
- ASU 2016-09 – *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting;*
- ASU 2016-07 – *Investments – Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting;*
- ASU 2016-06 – *Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments;* and
- ASU 2016-05 – *Derivatives and Hedging (Topic 815): Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships.*

ASU 2017-12 provides targeted improvements to the hedge accounting model intended to facilitate financial reporting that more closely reflects an entity's risk management activities and to simplify application of hedge accounting. Changes under the new guidance include expansion of the types of risk management strategies eligible for hedge accounting, easing the documentation and effectiveness assessment requirements, changing how ineffectiveness is measured, and changing the presentation and disclosure requirements for hedge accounting activities.

We early adopted ASU 2017-12 in fourth quarter 2017. Our financial statements for the year ended December 31, 2017, include a cumulative-effect adjustment to opening retained earnings and adjustments to our 2017 earnings to reflect application of the new guidance effective January 1, 2017. The new guidance significantly reduces but does not eliminate interest-rate related hedge ineffectiveness and mitigates certain components of foreign currency related hedge ineffectiveness. In particular, we continued to experience hedge ineffectiveness volatility related to certain hedges of foreign-currency denominated debt liabilities. The adjustment as of January 1, 2017, reduced retained earnings by $381 million and increased other comprehensive income by $168 million. The effect of adoption on previously reported year-to-date results through September 30, 2017, increased net income by $169 million ($242 million pre-tax) and decreased other comprehensive income by $163 million.

ASU 2016-09 simplifies the accounting for share-based payment awards issued to employees. We have income tax effects based on changes in our stock price from the grant date to the vesting date of the employee stock compensation. The Update requires these income tax effects to be recognized in the statement of income within income tax expense instead of within additional paid-in capital. In addition, the Update requires changes to the Statement of Cash Flows including the classification between the operating and financing section for tax activity related to employee stock compensation, which we adopted retrospectively. We recorded excess tax benefits and tax deficiencies within income tax expense in the statement of income in first quarter 2017, on a prospective basis.

ASU 2016-07 eliminates the requirement for companies to retroactively apply the equity method of accounting for investments when increases in ownership interests or degree of influence result in the adoption of the equity method. Under the guidance, the equity method should be applied prospectively in the period in which the ownership changes occur. We adopted this change in first quarter 2017. The Update has been applied on a prospective basis and did not have a material impact on our consolidated financial statements.

ASU 2016-06 clarifies the criteria entities should use when evaluating whether embedded contingent put and call options in debt instruments should be separated from the debt instrument and accounted for separately as derivatives. The Update clarifies that companies should not consider whether the event that triggers the ability to exercise put or call options is related to interest rates or credit risk. We adopted this change in first quarter 2017. The Update did not have a material impact on our consolidated financial statements.

ASU 2016-05 clarifies that a change in the counterparty to a derivative instrument that has been designated as an accounting hedge does not require the hedging relationship to be dedesignated as long as all other hedge accounting criteria continue to be met. We adopted the guidance in first quarter 2017. The Update did not have a material impact on our consolidated financial statements.

Accounting Standards with Retrospective Application

The following accounting pronouncements have been issued by the FASB but are not yet effective:

- *ASU 2016-18* – Statement of Cash Flows (Topic 230): *Restricted Cash*; and
- ASU 2016-15 – *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.*

ASU 2016-18 requires that amounts described as restricted cash and cash equivalents be included with cash and cash equivalents in the statement of cash flows. In addition, we will be required to disclose information in our footnotes about the nature of the restriction on cash and cash equivalents. The Update is effective for us in first quarter 2018 with retrospective application. The Update did not have a material impact on our consolidated financial statements.

ASU 2016-15 addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice for reporting in the Statement of Cash Flows. The Update is effective for us in first quarter 2018 with retrospective application. The Update did not have a material impact on our consolidated financial statements.

Consolidation

Our consolidated financial statements include the accounts of the Parent and our subsidiaries in which we have a controlling interest.

We are also a variable interest holder in certain entities in which equity investors do not have the characteristics of a controlling financial interest or where the entity does not have enough equity at risk to finance its activities without additional subordinated financial support from other parties (referred to as variable interest entities (VIEs)). Our variable interest arises from contractual, ownership or other monetary interests in the entity, which change with fluctuations in the fair value of the entity's net assets. We consolidate a VIE if we are the primary beneficiary. We are the primary beneficiary if we have a controlling financial interest, which includes both the power to direct the activities that most significantly impact the VIE and a variable interest that potentially could be significant to the VIE. To determine whether or not a variable interest we hold could potentially be significant to the VIE, we consider both qualitative and quantitative factors regarding the nature, size and form of our involvement with the VIE. We assess whether or not we are the primary beneficiary of a VIE on an ongoing basis.

Significant intercompany accounts and transactions are eliminated in consolidation. When we have significant influence over operating and financing decisions for a company but do not own a majority of the voting equity interests, we account for the investment using the equity method of accounting, which requires us to recognize our proportionate share of the company's earnings. If we do not have significant influence, we recognize the equity investment at cost except for (1) marketable equity securities, which we recognize at fair value with changes in fair value included in other comprehensive income (OCI), and (2) nonmarketable equity investments for which we have elected the fair value option. Investments accounted for under the equity or cost method are included in other assets.

Cash and Due From Banks

Cash and cash equivalents include cash on hand, cash items in transit, and amounts due from other depository institutions.

Trading Assets

Trading assets are predominantly securities, including corporate debt, U.S. government agency obligations and other securities and certain loans held for market-making purposes to support the buying and selling demands of our customers. Interest-only strips and other retained interests in securitizations that can be contractually prepaid or otherwise settled in a way that the holder would not recover substantially all of its recorded investment are classified as trading assets. Trading assets are carried at fair value, with changes in fair value recorded in net gains from trading activities. For securities and loans in trading assets, interest and dividend income are recorded in interest income.

Investments

Our investments include various debt and marketable equity securities and nonmarketable equity investments. We classify debt and marketable equity securities as available-for-sale or held-to-maturity securities based on our intent to hold to maturity. Our nonmarketable equity investments are reported in other assets.

AVAILABLE-FOR-SALE SECURITIES Debt securities that we might not hold until maturity and marketable equity securities are classified as available-for-sale securities and reported at fair value. Unrealized gains and losses, after applicable income taxes, are reported in cumulative OCI.

We conduct other-than-temporary impairment (OTTI) analysis on a quarterly basis or more often if a potential loss-triggering event occurs. The initial indicator of OTTI for both debt and equity securities is a decline in fair value below the amount recorded for an investment and the severity and duration of the decline.

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

Estimating recovery of the amortized cost basis of a debt security is based upon an assessment of the cash flows expected to be collected. If the present value of cash flows expected to be collected, discounted at the security's effective yield, is less than amortized cost, OTTI is considered to have occurred. In performing an assessment of the cash flows expected to be collected, we consider all relevant information including:

- the length of time and the extent to which the fair value has been less than the amortized cost basis;
- the historical and implied volatility of the fair value of the security;
- the cause of the price decline, such as the general level of interest rates or adverse conditions specifically related to the security, an industry or a geographic area;
- the issuer's financial condition, near-term prospects and ability to service the debt;
- the payment structure of the debt security and the likelihood of the issuer being able to make payments that increase in the future;
- for asset-backed securities, the credit performance of the underlying collateral, including delinquency rates, level of non-performing assets, cumulative losses to date, collateral

value and the remaining credit enhancement compared with expected credit losses;
- any change in rating agencies' credit ratings at evaluation date from acquisition date and any likely imminent action;
- independent analyst reports and forecasts, sector credit ratings and other independent market data; and
- recoveries or additional declines in fair value subsequent to the balance sheet date.

If we intend to sell the security, or if it is more likely than not we will be required to sell the security before recovery of amortized cost basis, an OTTI write-down is recognized in earnings equal to the entire difference between the amortized cost basis and fair value of the security. For debt securities that are considered other-than-temporarily impaired that we do not intend to sell or it is more likely than not that we will not be required to sell before recovery, the OTTI write-down is separated into an amount representing the credit loss, which is recognized in earnings, and the amount related to all other factors, which is recognized in OCI. The measurement of the credit loss component is equal to the difference between the debt security's amortized cost basis and the present value of its expected future cash flows discounted at the security's effective yield. The remaining difference between the security's fair value and the present value of expected future cash flows is due to factors that are not credit-related and, therefore, is recognized in OCI. We believe that we will fully collect the carrying value of securities on which we have recorded a non-credit-related impairment in OCI.

We hold investments in perpetual preferred securities (PPS) that are structured in equity form but have many of the characteristics of debt instruments, including periodic cash flows in the form of dividends, call features, ratings that are similar to debt securities and pricing like long-term callable bonds.

Because of the hybrid nature of these securities, we evaluate PPS for OTTI using a model similar to the model we use for debt securities as described above. Among the factors we consider in our evaluation of PPS are whether there is any evidence of deterioration in the credit of the issuer as indicated by a decline in cash flows or a rating agency downgrade to below investment grade and the estimated recovery period. OTTI write-downs of PPS are recognized in earnings equal to the difference between the cost basis and fair value of the security. Based upon the factors considered in our OTTI evaluation, we believe our investments in PPS currently rated investment grade will be fully realized and, accordingly, have not recognized OTTI on such securities.

For marketable equity securities other than PPS, OTTI evaluations focus on whether evidence exists that supports recovery of the unrealized loss within a timeframe consistent with temporary impairment. This evaluation considers the severity of and length of time fair value is below cost, our intent and ability to hold the security until forecasted recovery of the fair value of the security, and the investee's financial condition, capital strength, and near-term prospects.

We recognize realized gains and losses on the sale of investment securities in noninterest income using the specific identification method.

Unamortized premiums and discounts are recognized in interest income over the contractual life of the security using the interest method. As principal repayments are received on securities (i.e., primarily mortgage-backed securities (MBS)) a proportionate amount of the related premium or discount is recognized in income so that the effective interest rate on the remaining portion of the security continues unchanged.

HELD-TO-MATURITY SECURITIES Debt securities for which the Company has the positive intent and ability to hold to maturity are reported at historical cost adjusted for amortization of premiums and accretion of discounts. We recognize OTTI when there is a decline in fair value and we do not expect to recover the entire amortized cost basis of the debt security. The amortized cost is written-down to fair value with the credit loss component recorded to earnings and the remaining component recognized in OCI. The OTTI assessment related to whether we expect recovery of the amortized cost basis and determination of any credit loss component recognized in earnings for held-to-maturity securities is the same as described for available-for-sale securities. Security transfers to the held-to-maturity classification are recorded at fair value. Unrealized gains or losses from the transfer of available-for-sale securities continue to be reported in cumulative OCI and are amortized into earnings over the remaining life of the security using the effective interest method.

NONMARKETABLE EQUITY INVESTMENTS Nonmarketable equity investments include low income housing tax credit investments, equity securities that are not publicly traded and securities acquired for various purposes, such as to meet regulatory requirements (for example, Federal Reserve Bank and Federal Home Loan Bank (FHLB) stock). We have elected the fair value option for some of these investments with the remainder of these investments accounted for under the cost or equity method, which we review at least quarterly for possible OTTI. Our review typically includes an analysis of the facts and circumstances of each investment, the expectations for the investment's cash flows and capital needs, the viability of its business model and our exit strategy. We reduce the asset value when we consider declines in value to be other than temporary. We recognize the estimated loss as a loss from equity investments in noninterest income.

Securities Purchased and Sold Agreements

Securities purchased under resale agreements and securities sold under repurchase agreements are accounted for as collateralized financing transactions and are recorded at the acquisition or sale price plus accrued interest. We monitor the fair value of securities purchased and sold and obtain collateral from or return it to counterparties when appropriate. These financing transactions do not create material credit risk given the collateral provided and the related monitoring process.

Mortgages and Loans Held for Sale

Mortgages held for sale (MHFS) include commercial and residential mortgages originated for sale and securitization in the secondary market, which is our principal market, or for sale as whole loans. We have elected the fair value option for substantially all residential MHFS (see Note 17 (Fair Values of Assets and Liabilities)). The remaining residential MHFS are held at the lower of cost or fair value (LOCOM) and are valued on an aggregate portfolio basis. Commercial MHFS are held at LOCOM and are valued on an individual loan basis.

Loans held for sale (LHFS) are carried at LOCOM. Generally, consumer loans are valued on an aggregate portfolio basis, and commercial loans are valued on an individual loan basis.

Gains and losses on MHFS are recorded in mortgage banking noninterest income. Gains and losses on LHFS are recorded in other noninterest income. Direct loan origination costs and fees for MHFS and LHFS under the fair value option are recognized in income at origination. For MHFS and LHFS recorded at LOCOM, loan costs and fees are deferred at origination and are recognized in income at time of sale. Interest income on MHFS and LHFS is calculated based upon the note rate of the loan and is recorded in interest income.

Our lines of business are authorized to originate held-for-investment loans that meet or exceed established loan product profitability criteria, including minimum positive net interest margin spreads in excess of funding costs. When a determination is made at the time of commitment to originate loans as held for investment, it is our intent to hold these loans to maturity or for the "foreseeable future," subject to periodic review under our management evaluation processes, including corporate asset/liability management. In determining the "foreseeable future" for loans, management considers (1) the current economic environment and market conditions, (2) our business strategy and current business plans, (3) the nature and type of the loan receivable, including its expected life, and (4) our current financial condition and liquidity demands. If subsequent changes, including changes in interest rates, significantly impact the ongoing profitability of certain loan products, we may subsequently change our intent to hold these loans, and we would take actions to sell such loans. Upon such management determination, we immediately transfer these loans to the MHFS or LHFS portfolio at LOCOM.

Loans

Loans are reported at their outstanding principal balances net of any unearned income, cumulative charge-offs, unamortized deferred fees and costs on originated loans and unamortized premiums or discounts on purchased loans. PCI loans are reported net of any remaining purchase accounting adjustments. See the "Purchased Credit-Impaired Loans" section in this Note for our accounting policy for PCI loans.

Unearned income, deferred fees and costs, and discounts and premiums are amortized to interest income over the contractual life of the loan using the interest method. Loan commitment fees are generally deferred and amortized into noninterest income on a straight-line basis over the commitment period.

We have certain private label and co-brand credit card loans through a program agreement that involves our active participation in the operating activity of the program with a third party. We share in the economic results of the loans subject to this agreement. We consider the program to be a collaborative arrangement and therefore report our share of revenue and losses on a net basis in interest income for loans, other noninterest income and provision for credit losses as applicable. Our net share of revenue from this activity represented less than 1% of our total revenues for 2017.

Loans also include direct financing leases that are recorded at the aggregate of minimum lease payments receivable plus the estimated residual value of the leased property, less unearned income. Leveraged leases, which are a form of direct financing leases, are recorded net of related non-recourse debt. Leasing income is recognized as a constant percentage of outstanding lease financing balances over the lease terms in interest income.

NONACCRUAL AND PAST DUE LOANS We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower's financial condition and the adequacy of collateral, if any);
- they are 90 days (120 days with respect to real estate 1-4 family first and junior lien mortgages) past due for interest or principal, unless both well-secured and in the process of collection;
- part of the principal balance has been charged off, except for credit card loans, which are generally not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due;
- for junior lien mortgages, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status; or
- consumer real estate and automobile loans receive notification of bankruptcy, regardless of their delinquency status.

PCI loans are written down at acquisition to fair value using an estimate of cash flows deemed to be collectible and an accretable yield is established. Accordingly, such loans are not classified as nonaccrual because they continue to earn interest from accretable yield, independent of performance in accordance of their contractual terms, and we expect to fully collect the new carrying values of such loans (that is, the new cost basis arising out of purchase accounting).

When we place a loan on nonaccrual status, we reverse the accrued unpaid interest receivable against interest income and suspend amortization of any net deferred fees. If the ultimate collectability of the recorded loan balance is in doubt on a nonaccrual loan, the cost recovery method is used and cash collected is applied to first reduce the carrying value of the loan. Otherwise, interest income may be recognized to the extent cash is received. Generally, we return a loan to accrual status when all delinquent interest and principal become current under the terms of the loan agreement and collectability of remaining principal and interest is no longer doubtful.

We typically re-underwrite modified loans at the time of a restructuring to determine if there is sufficient evidence of sustained repayment capacity based on the borrower's financial strength, including documented income, debt to income ratios and other factors. If the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. When a loan classified as a troubled debt restructuring (TDR) performs in accordance with its modified terms, the loan either continues to accrue interest (for performing loans) or will return to accrual status after the borrower demonstrates a sustained period of performance (generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to the modification). Loans will be placed on nonaccrual status and a corresponding charge-off is recorded if we believe it is probable that principal and interest contractually due under the modified terms of the agreement will not be collectible.

Our loans are considered past due when contractually required principal or interest payments have not been made on the due dates.

LOAN CHARGE-OFF POLICIES For commercial loans, we generally fully charge off or charge down to net realizable value (fair value of collateral, less estimated costs to sell) for loans secured by collateral when:

- management judges the loan to be uncollectible;
- repayment is deemed to be protracted beyond reasonable time frames;
- the loan has been classified as a loss by either our internal loan review process or our banking regulatory agencies;

- the customer has filed bankruptcy and the loss becomes evident owing to a lack of assets; or
- the loan is 180 days past due unless both well-secured and in the process of collection.

For consumer loans, we fully charge off or charge down to net realizable value when deemed uncollectible due to bankruptcy or other factors, or no later than reaching a defined number of days past due, as follows:
- 1-4 family first and junior lien mortgages – We generally charge down to net realizable value when the loan is 180 days past due.
- Automobile loans – We generally fully charge off when the loan is 120 days past due.
- Credit card loans – We generally fully charge off when the loan is 180 days past due.
- Unsecured loans (closed end) – We generally fully charge off when the loan is 120 days past due.
- Unsecured loans (open end) – We generally fully charge off when the loan is 180 days past due.
- Other secured loans – We generally fully or partially charge down to net realizable value when the loan is 120 days past due.

IMPAIRED LOANS We consider a loan to be impaired when, based on current information and events, we determine that we will not be able to collect all amounts due according to the loan contract, including scheduled interest payments. This evaluation is generally based on delinquency information, an assessment of the borrower's financial condition and the adequacy of collateral, if any. Our impaired loans predominantly include loans on nonaccrual status in the commercial portfolio segment and loans modified in a TDR, whether on accrual or nonaccrual status.

When we identify a loan as impaired, we generally measure the impairment, if any, based on the difference between the recorded investment in the loan (net of previous charge-offs, deferred loan fees or costs and unamortized premium or discount) and the present value of expected future cash flows, discounted at the loan's effective interest rate. When the value of an impaired loan is calculated by discounting expected cash flows, interest income is recognized using the loan's effective interest rate over the remaining life of the loan. When collateral is the sole source of repayment for the impaired loan, rather than the borrower's income or other sources of repayment, we charge down to net realizable value.

TROUBLED DEBT RESTRUCTURINGS In situations where, for economic or legal reasons related to a borrower's financial difficulties, we grant a concession for other than an insignificant period of time to the borrower that we would not otherwise consider, the related loan is classified as a TDR. These modified terms may include rate reductions, principal forgiveness, term extensions, payment forbearance and other actions intended to minimize our economic loss and to avoid foreclosure or repossession of the collateral, if applicable. For modifications where we forgive principal, the entire amount of such principal forgiveness is immediately charged off. Loans classified as TDRs, including loans in trial payment periods (trial modifications), are considered impaired loans. Other than resolutions such as foreclosures, sales and transfers to held-for-sale, we may remove loans held for investment from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

PURCHASED CREDIT-IMPAIRED LOANS Loans acquired with evidence of credit deterioration since their origination and where it is probable that we will not collect all contractually required principal and interest payments are PCI loans. PCI loans are recorded at fair value at the date of acquisition, and the historical allowance for credit losses related to these loans is not carried over. Fair value at date of acquisition is generally determined using a discounted cash flow method and any excess cash flow expected to be collected over the carrying value (estimated fair value at acquisition date) is referred to as the accretable yield and is recognized in interest income using an effective yield method over the remaining life of the loan, or pool of loans if aggregated based on common risk characteristics. The difference between contractually required payments and the cash flows expected to be collected at acquisition, considering the impact of prepayments, is referred to as the nonaccretable difference. Based on quarterly evaluations of remaining cash flows expected to be collected, expected decreases may result in recording a provision for loss and expected increases may result in a prospective yield adjustment after first reversing any allowance for losses related to the loan, or pool of loans.

Resolutions of loans may include sales of loans to third parties, receipt of payments in settlement with the borrower, or foreclosure of the collateral. For individual PCI loans, gains or losses on sales to third parties are included in other noninterest income, and gains or losses as a result of a settlement with the borrower are included in interest income. Our policy is to remove an individual loan from a pool based on comparing the amount received from its resolution with its contractual amount. Any difference between these amounts is absorbed by the nonaccretable difference for the entire pool, which assumes that the amount received from resolution approximates pool performance expectations. Any material change in remaining effective yield caused by this removal method is addressed by our quarterly cash flow evaluation process for each pool.

Modified PCI loans are not removed from a pool even if those loans would otherwise be deemed TDRs. Modified PCI loans that are accounted for individually are considered TDRs and removed from PCI accounting if there has been a concession granted in excess of the original nonaccretable difference. We include these TDRs in our impaired loans.

FORECLOSED ASSETS Foreclosed assets obtained through our lending activities primarily include real estate. Generally, loans have been written down to their net realizable value prior to foreclosure. Any further reduction to their net realizable value is recorded with a charge to the allowance for credit losses at foreclosure. We allow up to 90 days after foreclosure to finalize determination of net realizable value. Thereafter, changes in net realizable value are recorded to noninterest expense. The net realizable value of these assets is reviewed and updated periodically depending on the type of property. Certain government-guaranteed mortgage loans upon foreclosure are included in accounts receivable, not foreclosed assets. These receivables were loans predominantly insured by the FHA or guaranteed by the VA and are measured based on the balance expected to be recovered from the FHA or VA.

ALLOWANCE FOR CREDIT LOSSES (ACL) The allowance for credit losses is management's estimate of credit losses inherent in the loan portfolio, including unfunded credit commitments, at the balance sheet date. We have an established process to determine the appropriateness of the allowance for credit losses that assesses the losses inherent in our portfolio and related unfunded credit commitments. We develop and document our allowance methodology at the portfolio segment level – commercial loan portfolio and consumer loan portfolio. While we attribute portions of the allowance to our respective commercial and consumer portfolio segments, the entire allowance is available to absorb credit losses inherent in the total loan portfolio and unfunded credit commitments.

Our process involves procedures to appropriately consider the unique risk characteristics of our commercial and consumer loan portfolio segments. For each portfolio segment, losses are estimated collectively for groups of loans with similar characteristics, individually or pooled for impaired loans or, for PCI loans, based on the changes in cash flows expected to be collected.

Our allowance levels are influenced by loan volumes, loan grade migration or delinquency status, historic loss experience and other conditions influencing loss expectations, such as economic conditions.

COMMERCIAL PORTFOLIO SEGMENT ACL METHODOLOGY Generally, commercial loans are assessed for estimated losses by grading each loan using various risk factors as identified through periodic reviews. Our estimation approach for the commercial portfolio reflects the estimated probability of default in accordance with the borrower's financial strength and the severity of loss in the event of default, considering the quality of any underlying collateral. Probability of default and severity at the time of default are statistically derived through historical observations of default and losses after default within each credit risk rating. These estimates are adjusted as appropriate based on additional analysis of long-term average loss experience compared to previously forecasted losses, external loss data or other risks identified from current economic conditions and credit quality trends. The estimated probability of default and severity at the time of default are applied to loan equivalent exposures to estimate losses for unfunded credit commitments.

The allowance also includes an amount for the estimated impairment on nonaccrual commercial loans and commercial loans modified in a TDR, whether on accrual or nonaccrual status.

CONSUMER PORTFOLIO SEGMENT ACL METHODOLOGY For consumer loans that are not identified as a TDR, we generally determine the allowance on a collective basis utilizing forecasted losses to represent our best estimate of inherent loss. We pool loans, generally by product types with similar risk characteristics, such as residential real estate mortgages and credit cards. As appropriate and to achieve greater accuracy, we may further stratify selected portfolios by sub-product, origination channel, vintage, loss type, geographic location and other predictive characteristics. Models designed for each pool are utilized to develop the loss estimates. We use assumptions for these pools in our forecast models, such as historic delinquency and default, loss severity, home price trends, unemployment trends, and other key economic variables that may influence the frequency and severity of losses in the pool.

In determining the appropriate allowance attributable to our residential mortgage portfolio, we take into consideration portfolios determined to be at elevated risk, such as junior lien mortgages behind delinquent first lien mortgages and junior lien lines of credit subject to near term significant payment increases. We incorporate the default rates and high severity of loss for these higher risk portfolios, including the impact of our established loan modification programs. Accordingly, the loss content associated with the effects of loan modifications and higher risk portfolios has been captured in our ACL methodology.

We separately estimate impairment for consumer loans that have been modified in a TDR (including trial modifications), whether on accrual or nonaccrual status.

OTHER ACL MATTERS The allowance for credit losses for both portfolio segments includes an amount for imprecision or uncertainty that may change from period to period. This amount represents management's judgment of risks inherent in the processes and assumptions used in establishing the allowance. This imprecision considers economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

Securitizations and Beneficial Interests

In certain asset securitization transactions that meet the applicable criteria to be accounted for as a sale, assets are sold to an entity referred to as a Special Purpose Entity (SPE), which then issues beneficial interests in the form of senior and subordinated interests collateralized by the assets. In some cases, we may retain beneficial interests issued by the entity. Additionally, from time to time, we may also re-securitize certain assets in a new securitization transaction.

The assets and liabilities transferred to an SPE are excluded from our consolidated balance sheet if the transfer qualifies as a sale and we are not required to consolidate the SPE.

For transfers of financial assets recorded as sales, we recognize and initially measure at fair value all assets obtained (including beneficial interests) and liabilities incurred. We record a gain or loss in noninterest income for the difference between the carrying amount and the fair value of the assets sold. Fair values are based on quoted market prices, quoted market prices for similar assets, or if market prices are not available, then the fair value is estimated using discounted cash flow analyses with assumptions for credit losses, prepayments and discount rates that are corroborated by and verified against market observable data, where possible. Retained interests and liabilities incurred from securitizations with off-balance sheet entities, including SPEs and VIEs, where we are not the primary beneficiary, are classified as investment securities, trading account assets, loans, MSRs, derivative assets and liabilities, other assets, other liabilities (including liabilities for mortgage repurchase losses), or long-term debt and are accounted for as described herein.

Mortgage Servicing Rights (MSRs)

We recognize the rights to service mortgage loans for others, or MSRs, as assets whether we purchase the MSRs or the MSRs result from a sale or securitization of loans we originate (asset transfers). We initially record all of our MSRs at fair value. Subsequently, residential loan MSRs are carried at fair value. All of our MSRs related to our commercial mortgage loans are subsequently measured at LOCOM. The valuation and sensitivity of MSRs is discussed further in Note 8 (Securitizations and Variable Interest Entities), Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities).

For MSRs carried at fair value, changes in fair value are reported in mortgage banking noninterest income in the period in which the change occurs. MSRs subsequently measured at LOCOM are amortized in proportion to, and over the period of, estimated net servicing income. The amortization of MSRs is reported in mortgage banking noninterest income, analyzed monthly and adjusted to reflect changes in prepayment speeds, as well as other factors.

MSRs accounted for at LOCOM are periodically evaluated for impairment based on the fair value of those assets. For purposes of impairment evaluation and measurement, we stratify MSRs based on the predominant risk characteristics of the underlying loans, including investor and product type. If, by individual stratum, the carrying amount of these MSRs exceeds fair value, a valuation allowance is established. The valuation allowance is adjusted as the fair value changes.

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. Capital leases, where we are the lessee, are included in premises and equipment at the capitalized amount less accumulated amortization.

We primarily use the straight-line method of depreciation and amortization. Estimated useful lives range up to 40 years for buildings, up to 10 years for furniture and equipment, and the shorter of the estimated useful life (up to 8 years) or the lease term for leasehold improvements. We amortize capitalized leased assets on a straight-line basis over the lives of the respective leases.

Goodwill and Identifiable Intangible Assets

Goodwill is recorded in business combinations under the purchase method of accounting when the purchase price is higher than the fair value of net assets, including identifiable intangible assets.

We assess goodwill for impairment at a reporting unit level on an annual basis or more frequently in certain circumstances. We have determined that our reporting units are one level below the operating segments and distinguish these reporting units based on how the segments and reporting units are managed, taking into consideration the economic characteristics, nature of the products, and customers of the segments and reporting units. At the time we acquire a business, we allocate goodwill to applicable reporting units based on their relative fair value, and if we have a significant business reorganization, we may reallocate the goodwill. If we sell a business, a portion of goodwill is included with the carrying amount of the divested business.

We have the option of performing a qualitative assessment of goodwill. We may also elect to bypass the qualitative test and proceed directly to a quantitative test. If we perform a qualitative assessment of goodwill to test for impairment and conclude it is more likely than not that a reporting unit's fair value is greater than its carrying amount, quantitative tests are not required. However, if we determine it is more likely than not that a reporting unit's fair value is less than its carrying amount, then we complete a quantitative assessment to determine if there is goodwill impairment. We apply various quantitative valuation methodologies, including discounted cash flow and earnings multiple approaches, to determine the estimated fair value, which is compared to the carrying value of each reporting unit. If the fair value is less than the carrying amount, an additional test is required to measure the amount of impairment. We recognize impairment losses as a charge to other noninterest expense (unless related to discontinued operations) and an adjustment to the carrying value of the goodwill asset. Subsequent reversals of goodwill impairment are prohibited.

We amortize core deposit and other customer relationship intangibles on an accelerated basis over useful lives not exceeding 10 years. We review such intangibles for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. Impairment is indicated if the sum of undiscounted estimated future net cash flows is less than the carrying value of the asset. Impairment is permanently recognized by writing down the asset to the extent that the carrying value exceeds the estimated fair value.

Derivatives and Hedging Activities

DERIVATIVES We recognize all derivatives on the balance sheet at fair value. On the date we enter into a derivative contract, we designate the derivative as (1) qualifying for hedge accounting in a hedge of the fair value of a recognized asset or liability or an unrecognized firm commitment, including hedges of foreign currency exposure ("fair value hedge"), (2) qualifying for hedge accounting in a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability ("cash flow hedge"), or (3) held for customer accommodation trading or asset/liability risk management or other purposes, including economic hedges not qualifying for hedge accounting. For derivatives not designated as a fair value or cash flow hedge, we report changes in the fair values in current period noninterest income.

DOCUMENTATION AND EFFECTIVENESS ASSESSMENT FOR ACCOUNTING HEDGES For fair value and cash flow hedges qualifying for hedge accounting, we formally document at inception the relationship between hedging instruments and hedged items, our risk management objective, strategy and our evaluation of effectiveness for our hedge transactions. This process includes linking all derivatives designated as fair value or cash flow hedges to specific assets and liabilities on the balance sheet or to specific forecasted transactions. We assess hedge effectiveness using regression analysis, both at inception of the hedging relationship and on an ongoing basis. For fair value hedges, the regression analysis involves regressing the periodic change in fair value of the hedging instrument against the periodic changes in fair value of the asset or liability being hedged due to changes in the hedged risk(s). For cash flow hedges, the regression analysis involves regressing the periodic changes in fair value of the hedging instrument against the periodic changes in fair value of the hypothetical derivative. The hypothetical derivative has terms that identically match and offset the cash flows of the forecasted transaction being hedged due to changes in the hedged risk(s). The assessment for fair value and cash flow hedges includes an evaluation of the quantitative measures of the regression results used to validate the conclusion of high effectiveness. Periodically, as required, we also formally assess whether the derivative we designated in each hedging relationship is expected to be and has been highly effective in offsetting changes in fair values or cash flows of the hedged item using the regression analysis method.

FAIR VALUE HEDGES For a fair value hedge, we record changes in the fair value of the derivative and the hedged asset or liability due to the hedged risk in current period net income, except for certain derivatives in which a portion is recorded to OCI. We present derivative gains or losses in the same income statement category as the hedged asset or liability, as follows:

- For fair value hedges of interest rate risk, amounts are reflected in net interest income.
- For hedges of foreign currency risk, amounts representing the fair value changes less the accrual for periodic cash flow settlements are reflected in noninterest income. The periodic cash flow settlements are reflected in net interest income.

- For hedges of both interest rate risk and foreign currency risk, amounts representing the fair value change less the accrual for periodic cash flow settlements is attributed to both net interest income and noninterest income. The periodic cash flow settlements are reflected in net interest income.

The entire derivative gain or loss is included in the assessment of hedge effectiveness for all fair value hedge relationships, except for hedges of foreign-currency denominated available-for-sale investment securities and long-term debt liabilities, as follows:

- When hedged with cross-currency swaps, the change in fair value of the derivative attributable to cross-currency basis spread changes component is excluded from the assessment of hedge effectiveness. The initial fair value of the excluded component is amortized to net interest income. For these hedges, the difference between changes in fair value of the excluded component and the amount recorded in earnings is recorded in OCI.
- When hedged with foreign currency forward derivatives, the change in fair value of the derivative attributable to the time value component related to the changes in the difference between the spot and forward price is excluded from the assessment of hedge effectiveness. For these hedges, the changes in fair value of the excluded component are recorded in net interest income.

CASH FLOW HEDGES For a cash flow hedge, we record changes in the fair value of the derivative in OCI. We subsequently reclassify gains and losses from these changes in fair value from OCI to net income in the same period(s) that the hedged transaction affects net income and in the same income statement category as the hedged item, thus to net interest income. The entire gain or loss on these derivatives is included in the assessment of hedge effectiveness.

DISCONTINUING HEDGE ACCOUNTING We discontinue hedge accounting prospectively when (1) a derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item, (2) a derivative expires or is sold, terminated or exercised, (3) we elect to discontinue the designation of a derivative as a hedge, or (4) in a cash flow hedge, a derivative is de-designated because it is no longer probable that a forecasted transaction will occur.

When we discontinue fair value hedge accounting, we no longer adjust the previously hedged asset or liability for changes in fair value, and remaining cumulative adjustments to the hedged item are accounted for in the same manner as other components of the carrying amount of the asset or liability. If the derivative continues to be held after fair value hedge accounting ceases, we carry the derivative on the balance sheet at its fair value with changes in fair value included in noninterest income.

When we discontinue cash flow hedge accounting and it is probable that the forecasted transaction will occur, the accumulated amount reported in OCI at the de-designation date continues to be reported in OCI until the forecasted transaction affects net income at which point the related OCI amount is reclassified to net income. If cash flow hedge accounting is discontinued and it is probable the forecasted transaction will no longer occur, the accumulated gains and losses reported in OCI at the de-designation date is immediately reclassified to net income. If the derivative continues to be held after cash flow hedge accounting ceases, we carry the derivative on the balance sheet at its fair value with changes in fair value included in noninterest income.

EMBEDDED DERIVATIVES We may purchase or originate financial instruments that contain an embedded derivative. At inception of the financial instrument, we assess (1) if the economic characteristics of the embedded derivative are not clearly and closely related to the economic characteristics of the financial instrument (host contract), (2) if the financial instrument that embodies both the embedded derivative and the host contract is not measured at fair value with changes in fair value reported in net income, and (3) if a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative. If the embedded derivative meets all of these conditions, we separate it from the host contract by recording the bifurcated derivative at fair value and the remaining host contract at the difference between the basis of the hybrid instrument and the fair value of the bifurcated derivative. The bifurcated derivative is carried at fair value with changes recorded in current period noninterest income.

COUNTERPARTY CREDIT RISK AND NETTING By using derivatives, we are exposed to counterparty credit risk, which is the risk that counterparties to the derivative contracts do not perform as expected. If a counterparty fails to perform, our counterparty credit risk is equal to the amount reported as a derivative asset on our balance sheet. The amounts reported as a derivative asset are derivative contracts in a gain position, and to the extent subject to legally enforceable master netting arrangements, net of derivatives in a loss position with the same counterparty and cash collateral received. We minimize counterparty credit risk through credit approvals, limits, monitoring procedures, executing master netting arrangements and obtaining collateral, where appropriate. Counterparty credit risk related to derivatives is considered in determining fair value and our assessment of hedge effectiveness. To the extent derivatives subject to master netting arrangements meet the applicable requirements, including determining the legal enforceability of the arrangement, it is our policy to present derivative balances and related cash collateral amounts net on the balance sheet. In the second quarter of 2017, we adopted Settlement to Market treatment for the cash collateralizing our interest rate derivative contracts with certain centrally cleared counterparties. As a result of this adoption, derivative balances with these counterparties are considered settled by the collateral.

For additional information on our derivatives and hedging activities, see Note 16 (Derivatives).

Operating Lease Assets

Operating lease rental income for leased assets is recognized in other income on a straight-line basis over the lease term. Related depreciation expense is recorded on a straight-line basis over the estimated useful life, considering the estimated residual value of the leased asset. The useful life may be adjusted to the term of the lease depending on our plans for the asset after the lease term. On a periodic basis, leased assets are reviewed for impairment. Impairment loss is recognized if the carrying amount of leased assets exceeds fair value and is not recoverable. The carrying amount of leased assets is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the lease payments and the estimated residual value upon the eventual disposition of the equipment.

Liability for Mortgage Loan Repurchase Losses

In connection with our sales and securitization of residential mortgage loans to various parties, we establish a mortgage repurchase liability, initially at fair value, related to various representations and warranties that reflect management's estimate of losses for loans for which we could have a repurchase obligation, whether or not we currently service those loans, based on a combination of factors. Such factors include default expectations, expected investor repurchase demands (influenced by current and expected mortgage loan file requests and mortgage insurance rescission notices, as well as estimated levels of origination defects) and appeals success rates (where the investor rescinds the demand based on a cure of the defect or acknowledges that the loan satisfies the investor's applicable representations and warranties), reimbursement by correspondent and other third-party originators, and projected loss severity. We continually update our mortgage repurchase liability estimate during the life of the loans.

The liability for mortgage loan repurchase losses is included in other liabilities. For additional information on our repurchase liability, see Note 9 (Mortgage Banking Activities).

Pension Accounting

We account for our defined benefit pension plans using an actuarial model. Two principal assumptions in determining net periodic pension cost are the discount rate and the expected long-term rate of return on plan assets.

A discount rate is used to estimate the present value of our future pension benefit obligations. We use a consistent methodology to determine the discount rate using a yield curve with maturity dates that closely match the estimated timing of the expected benefit payments for our plans. The yield curve is derived from a broad-based universe of high quality corporate bonds as of the measurement date.

Our determination of the reasonableness of our expected long-term rate of return on plan assets is highly quantitative by nature. We evaluate the current asset allocations and expected returns under two sets of conditions: (1) projected returns using several forward-looking capital market assumptions, and (2) historical returns for the main asset classes dating back to 1970 or the earliest period for which historical data was readily available for the asset classes included. Using long-term historical data allows us to capture multiple economic environments, which we believe is relevant when using historical returns. We place greater emphasis on the forward-looking return and risk assumptions than on historical results. We use the resulting projections to derive a base line expected rate of return and risk level for the Cash Balance Plan's prescribed asset mix. We evaluate the portfolio based on: (1) the established target asset allocations over short term (one-year) and longer term (ten-year) investment horizons, and (2) the range of potential outcomes over these horizons within specific standard deviations. We perform the above analyses to assess the reasonableness of our expected long-term rate of return on plan assets. We consider the expected rate of return to be a long-term average view of expected returns. The use of an expected long-term rate of return on plan assets may cause us to recognize pension income returns that are greater or less than the actual returns of plan assets in any given year. Differences between expected and actual returns in each year, if any, are included in our net actuarial gain or loss amount, which is recognized in OCI. We generally amortize net actuarial gain or loss in excess of a 5% corridor from accumulated OCI into net periodic pension cost over the estimated average remaining participation period, which at December 31, 2017, is 20 years. See Note 21 (Employee Benefits and Other Expenses) for additional information on our pension accounting.

Income Taxes

We file consolidated and separate company U.S. federal income tax returns, foreign tax returns and various combined and separate company state tax returns.

We evaluate two components of income tax expense: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to our uncertain tax positions. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. We determine deferred income taxes using the balance sheet method. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax bases of assets and liabilities, and recognizes enacted changes in tax rates and laws in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not". Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits. We account for interest and penalties as a component of income tax expense. We do not record U.S. tax on undistributed earnings of certain non-U.S. subsidiaries to the extent the earnings are indefinitely reinvested outside of the U.S. Foreign taxes paid are generally applied as credits to reduce U.S. income taxes payable. In 2017, we did however, record an estimate of the U.S. tax expense associated with a deemed repatriation as required under the Tax Act.

See Note 22 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Stock-Based Compensation

We have stock-based employee compensation plans as more fully discussed in Note 19 (Common Stock and Stock Plans). Our Long-Term Incentive Compensation Plan provides for awards of incentive and nonqualified stock options, stock appreciation rights, restricted shares, restricted share rights (RSRs), performance share awards (PSAs) and stock awards without restrictions. For most awards, we measure the cost of employee services received in exchange for an award of equity instruments, such as stock options, RSRs or PSAs, based on the fair value of the award on the grant date. The cost is normally recognized in our income statement over the vesting period of the award; awards with graded vesting are expensed on a straight-line method. Awards that continue to vest after retirement are expensed over the shorter of the period of time between the grant date and the final vesting period or between the grant date and when a team member becomes retirement eligible; awards to team members who are retirement eligible at the grant date are subject to immediate expensing upon grant.

Beginning in 2013, certain RSRs and all PSAs granted include discretionary conditions that can result in forfeiture and are subject to variable accounting. For these awards, the associated compensation expense fluctuates with changes in our stock price. For PSAs, compensation expense also fluctuates based on the estimated outcome of meeting the performance conditions.

Earnings Per Common Share

We compute earnings per common share by dividing net income (after deducting dividends on preferred stock) by the average number of common shares outstanding during the year. We compute diluted earnings per common share by dividing net income (after deducting dividends on preferred stock) by the average number of common shares outstanding during the year plus the effect of common stock equivalents (for example, stock options, restricted share rights, convertible debentures and warrants) that are dilutive.

Fair Value of Financial Instruments

We use fair value measurements in our fair value disclosures and to record certain assets and liabilities at fair value on a recurring basis, such as trading assets, or on a nonrecurring basis, such as measuring impairment on assets carried at amortized cost.

DETERMINATION OF FAIR VALUE We base our fair values on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. These fair value measurements are based on exit prices and determined by maximizing the use of observable inputs. However, for certain instruments we must utilize unobservable inputs in determining fair value due to the lack of observable inputs in the market, which requires greater judgment in measuring fair value.

In instances where there is limited or no observable market data, fair value measurements for assets and liabilities are based primarily upon our own estimates or combination of our own estimates and third-party vendor or broker pricing, and the measurements are often calculated based on current pricing for products we offer or issue, the economic and competitive environment, the characteristics of the asset or liability and other such factors. As with any valuation technique used to estimate fair value, changes in underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values. Accordingly, these fair value estimates may not be realized in an actual sale or immediate settlement of the asset or liability.

We incorporate lack of liquidity into our fair value measurement based on the type of asset or liability measured and the valuation methodology used. For example, for certain residential MHFS and certain securities where the significant inputs have become unobservable due to illiquid markets and vendor or broker pricing is not used, we use a discounted cash flow technique to measure fair value. This technique incorporates forecasting of expected cash flows (adjusted for credit loss assumptions and estimated prepayment speeds) discounted at an appropriate market discount rate to reflect the lack of liquidity in the market that a market participant would consider. For other securities where vendor or broker pricing is used, we use either unadjusted broker quotes or vendor prices or vendor or broker prices adjusted by weighting them with internal discounted cash flow techniques to measure fair value. These unadjusted vendor or broker prices inherently reflect any lack of liquidity in the market, as the fair value measurement represents an exit price from a market participant viewpoint.

Where markets are inactive and transactions are not orderly, transaction or quoted prices for assets or liabilities in inactive markets may require adjustment due to the uncertainty of whether the underlying transactions are orderly. For items that use price quotes in inactive markets, we analyze the degree of market inactivity and distressed transactions to determine the appropriate adjustment to the price quotes.

We continually assess the level and volume of market activity in our investment security classes in determining adjustments, if any, to price quotes. Given market conditions can change over time, our determination of which securities markets are considered active or inactive can change. If we determine a market to be inactive, the degree to which price quotes require adjustment, can also change. See Note 17 (Fair Values of Assets and Liabilities) for discussion of the fair value hierarchy and valuation methodologies applied to financial instruments to determine fair value.

Private Share Repurchases

During 2017 and 2016, we repurchased approximately 89 million shares and 56 million shares of our common stock, respectively, under private forward repurchase contracts. We enter into these transactions with unrelated third parties to complement our open-market common stock repurchase strategies, to allow us to manage our share repurchases in a manner consistent with our capital plans, currently submitted under the Comprehensive Capital Analysis and Review (CCAR), and to provide an economic benefit to the Company.

Our payments to the counterparties for these private share repurchase contracts are recorded in permanent equity in the quarter paid and are not subject to re-measurement. The classification of the up-front payments as permanent equity assures that we have appropriate repurchase timing consistent with our capital plans, which contemplated a fixed dollar amount available per quarter for share repurchases pursuant to Federal Reserve Board (FRB) supervisory guidance. In return, the counterparty agrees to deliver a variable number of shares based on a per share discount to the volume-weighted average stock price over the contract period. There are no scenarios where the contracts would not either physically settle in shares or allow us to choose the settlement method.

We had no unsettled private share repurchase contracts at December 31, 2017. At December 31, 2016, we had a $750 million private forward repurchase contract outstanding that settled in first quarter 2017 for 14.7 million shares of common stock. Our total number of outstanding shares of common stock is not reduced until settlement of the private share repurchase contract.

SUPPLEMENTAL CASH FLOW INFORMATION Noncash activities are presented in Table 1.1, including information on transfers affecting MHFS, LHFS, and MSRs.

Table 1.1: Supplemental Cash Flow Information

		Year ended December 31,	
(in millions)	**2017**	2016	2015
Trading assets retained from securitizations of MHFS	**$ 52,435**	72,399	46,291
Transfers from loans to MHFS	**5,500**	6,894	9,205
Transfers from available-for-sale to held-to-maturity securities	**50,405**	4,161	4,972
Deconsolidation of reverse mortgages previously sold:			
Loans	**—**	3,807	—
Long-term debt	**—**	3,769	—

SUBSEQUENT EVENTS We have evaluated the effects of events that have occurred subsequent to December 31, 2017, and there have been no material events that would require recognition in our 2017 consolidated financial statements or disclosure in the Notes to the consolidated financial statements.

Note 2: Business Combinations

We regularly explore opportunities to acquire financial services companies and businesses. Generally, we do not make a public announcement about an acquisition opportunity until a definitive agreement has been signed. We also periodically review existing businesses to ensure they remain strategically aligned with our operating business model and risk profile.

Business combinations completed in 2017, 2016 and 2015 are presented in Table 2.1. As of December 31, 2017, we had no pending acquisitions.

Table 2.1: Business Combinations Activity

Name of acquisition	Location	Type of business	Date	Total assets (in millions)
2017:				
Golden Capital Management, LLC	**Charlotte, NC**	**Asset Management**	**July 1**	**$ 83**
2016:				
GE Railcar Services	Chicago, IL	Railcar and locomotive leasing	January 1	$ 4,339
GE Capital's Commercial Distribution Finance and Vendor Finance Businesses	North America, Asia, Australia / New Zealand and EMEA	Specialty Lending	March 1, July 1, August 1 & October 1	32,531
Analytic Investors, LLC	Los Angeles, CA	Asset Management	October 1	106
				$ 36,976
2015:				
hs.Financial Products GmbH	Germany	Asset Management	November 30	$ 3

We also completed one significant divestiture in 2017. On November 30, 2017, we completed the divestiture of Wells Fargo Insurance Services, USA. The transaction resulted in a pre-tax gain for 2017 of $848 million.

Note 3: Cash, Loan and Dividend Restrictions

Federal Reserve Board (FRB) regulations require that each of our subsidiary banks maintain reserve balances on deposit with the Federal Reserve Banks. The total daily average required reserve balance for all our subsidiary banks was $12.3 billion in 2017 and $10.7 billion in 2016.

Federal law restricts the amount and the terms of both credit and non-credit transactions between a bank and its nonbank affiliates. These covered transactions may not exceed 10% of the bank's capital and surplus (which for this purpose represents Tier 1 and Tier 2 capital, as calculated under the risk-based capital (RBC) guidelines, plus the balance of the allowance for credit losses excluded from Tier 2 capital) with any single nonbank affiliate and 20% of the bank's capital and surplus with all its nonbank affiliates. Transactions that are extensions of credit may require collateral to be held to provide added security to the bank. For further discussion of RBC, see Note 27 (Regulatory and Agency Capital Requirements) in this Report.

Dividends paid by our subsidiary banks are subject to various federal and state regulatory limitations. Dividends that may be paid by a national bank without the express approval of the Office of the Comptroller of the Currency (OCC) are limited to that bank's retained net profits for the preceding two calendar years plus retained net profits up to the date of any dividend declaration in the current calendar year. Retained net profits, as defined by the OCC, consist of net income less dividends declared during the period.

We also have a state-chartered subsidiary bank that is subject to state regulations that limit dividends. Under these provisions and regulatory limitations, our national and state-chartered subsidiary banks could have declared additional dividends of $20.9 billion at December 31, 2017. We have elected to retain higher capital at our national and state-chartered subsidiary banks in order to meet internal capital policy minimums and regulatory requirements. Our nonbank subsidiaries are also limited by certain federal and state statutory provisions and regulations covering the amount of dividends that may be paid in any given year. In addition, under a Support Agreement dated June 28, 2017 among Wells Fargo & Company, the parent holding company (the "Parent"), WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), and Wells Fargo Bank, N.A., Wells Fargo Securities, LLC, and Wells Fargo Clearing Services, LLC, each an indirect subsidiary of the Parent, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers. Based on retained earnings at December 31, 2017, our nonbank subsidiaries could have declared additional dividends of $23.9 billion at December 31, 2017, without obtaining prior approval.

The FRB's Capital Plan Rule (codified at 12 CFR 225.8 of Regulation Y) establishes capital planning and prior notice and approval requirements for capital distributions including dividends by certain large bank holding companies. The FRB has also published guidance regarding its supervisory expectations for capital planning, including capital policies regarding the process relating to common stock dividend and repurchase decisions in the FRB's SR Letter 15-18. The effect of this guidance is to require the approval of the FRB (or specifically under the Capital Plan Rule, a notice of non-objection) for the Company to repurchase or redeem common or perpetual preferred stock as well as to raise the per share quarterly dividend from its current level of $0.39 per share as declared by the Company's Board of Directors on January 23, 2018, payable on March 1, 2018.

Note 4: Federal Funds Sold, Securities Purchased under Resale Agreements and Other Short-Term Investments

Table 4.1 provides the detail of federal funds sold, securities purchased under short-term resale agreements (generally less than one year) and other short-term investments. Substantially all of the interest-earning deposits at December 31, 2017 and 2016 were held at Federal Reserve Banks.

Table 4.1: Fed Funds Sold and Other Short-Term Investments

(in millions)		Dec 31, 2017	Dec 31, 2016
Federal funds sold and securities purchased under resale agreements	$	**78,999**	58,215
Interest-earning deposits		**192,580**	200,671
Other short-term investments		**1,026**	7,152
Total	$	**272,605**	266,038

As part of maintaining our memberships in certain clearing organizations, we are required to stand ready to provide liquidity meant to sustain market clearing activity in the event unforeseen events occur or are deemed likely to occur. This includes commitments we have entered into to purchase securities under resale agreements from a central clearing organization that, at its option, require us to provide funding under such agreements. We do not have any outstanding amounts funded, and the amount of our unfunded contractual commitment was $2.8 billion and $2.9 billion as of December 31, 2017 and 2016, respectively.

We have classified securities purchased under long-term resale agreements (generally one year or more), which totaled $19.0 billion and $21.3 billion in loans at December 31, 2017 and 2016, respectively. For additional information on the collateral we receive from other entities under resale agreements and securities borrowings, see the "Offsetting of Resale and Repurchase Agreements and Securities Borrowing and Lending Agreements" section in Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments).

Note 5: Investment Securities

Table 5.1 provides the amortized cost and fair value by major categories of available-for-sale securities, which are carried at fair value, and held-to-maturity debt securities, which are carried at amortized cost. The net unrealized gains (losses) for available-for-sale securities are reported on an after-tax basis as a component of cumulative OCI.

Table 5.1: Amortized Cost and Fair Value

(in millions)		Amortized Cost	Gross unrealized gains	Gross unrealized losses	Fair value
December 31, 2017					
Available-for-sale securities:					
Securities of U.S. Treasury and federal agencies	**$**	**6,425**	**2**	**(108)**	**6,319**
Securities of U.S. states and political subdivisions		**50,733**	**1,032**	**(439)**	**51,326**
Mortgage-backed securities:					
Federal agencies		**160,561**	**930**	**(1,272)**	**160,219**
Residential		**4,356**	**254**	**(2)**	**4,608**
Commercial		**4,487**	**80**	**(2)**	**4,565**
Total mortgage-backed securities		**169,404**	**1,264**	**(1,276)**	**169,392**
Corporate debt securities		**7,343**	**363**	**(40)**	**7,666**
Collateralized loan and other debt obligations (1)		**35,675**	**384**	**(3)**	**36,056**
Other (2)		**5,516**	**137**	**(5)**	**5,648**
Total debt securities		**275,096**	**3,182**	**(1,871)**	**276,407**
Marketable equity securities:					
Perpetual preferred securities		**364**	**3**	**(9)**	**358**
Other marketable equity securities		**168**	**160**	**(8)**	**320**
Total marketable equity securities		**532**	**163**	**(17)**	**678**
Total available-for-sale securities		**275,628**	**3,345**	**(1,888)**	**277,085**
Held-to-maturity securities:					
Securities of U.S. Treasury and federal agencies		**44,720**	**189**	**(103)**	**44,806**
Securities of U.S. states and political subdivisions		**6,313**	**84**	**(43)**	**6,354**
Federal agency and other mortgage-backed securities (3)		**87,527**	**201**	**(682)**	**87,046**
Collateralized loan obligations		**661**	**4**	**—**	**665**
Other (2)		**114**	**—**	**—**	**114**
Total held-to-maturity securities		**139,335**	**478**	**(828)**	**138,985**
Total (4)	**$**	**414,963**	**3,823**	**(2,716)**	**416,070**
December 31, 2016					
Available-for-sale securities:					
Securities of U.S. Treasury and federal agencies	$	25,874	54	(109)	25,819
Securities of U.S. states and political subdivisions		52,121	551	(1,571)	51,101
Mortgage-backed securities:					
Federal agencies		163,513	1,175	(3,458)	161,230
Residential		7,375	449	(8)	7,816
Commercial		8,475	101	(74)	8,502
Total mortgage-backed securities		179,363	1,725	(3,540)	177,548
Corporate debt securities		11,186	381	(110)	11,457
Collateralized loan and other debt obligations (1)		34,764	287	(31)	35,020
Other (2)		6,139	104	(35)	6,208
Total debt securities		309,447	3,102	(5,396)	307,153
Marketable equity securities:					
Perpetual preferred securities		445	35	(11)	469
Other marketable equity securities		261	481	—	742
Total marketable equity securities		706	516	(11)	1,211
Total available-for-sale-securities		310,153	3,618	(5,407)	308,364
Held-to-maturity securities:					
Securities of U.S. Treasury and federal agencies		44,690	466	(77)	45,079
Securities of U.S. states and political subdivisions		6,336	17	(144)	6,209
Federal agency and other mortgage-backed securities (3)		45,161	100	(804)	44,457
Collateralized loan obligations		1,065	6	(1)	1,070
Other (2)		2,331	10	(1)	2,340
Total held-to-maturity securities		99,583	599	(1,027)	99,155
Total (4)	$	409,736	4,217	(6,434)	407,519

(1) The available-for-sale portfolio includes collateralized debt obligations (CDOs) with a cost basis and fair value of $887 million and $1.0 billion, respectively, at December 31, 2017, and $819 million and $847 million, respectively, at December 31, 2016.
(2) The "Other" category of available-for-sale securities largely includes asset-backed securities collateralized by student loans. Included in the "Other" category of held-to-maturity securities are asset-backed securities collateralized by automobile leases or loans and cash with a cost basis and fair value of $114 million each at December 31, 2017, and $1.3 billion each at December 31, 2016. Also included in the "Other" category of held-to-maturity securities are asset-backed securities collateralized by dealer floorplan loans with a cost basis and fair value of $0 billion each at December 31, 2017, and $1.1 billion each at December 31, 2016.
(3) Predominantly consists of federal agency mortgage-backed securities at December 31, 2017 and December 31, 2016.
(4) At December 31, 2017 and 2016, we held no securities of any single issuer (excluding the U.S. Treasury and federal agencies and government-sponsored entities (GSEs)) with a book value that exceeded 10% of stockholder's equity.

Gross Unrealized Losses and Fair Value

Table 5.2 shows the gross unrealized losses and fair value of securities in the investment securities portfolio by length of time that individual securities in each category have been in a continuous loss position. Debt securities on which we have taken credit-related OTTI write-downs are categorized as being "less than 12 months" or "12 months or more" in a continuous loss position based on the point in time that the fair value declined to below the cost basis and not the period of time since the credit-related OTTI write-down.

Table 5.2: Gross Unrealized Losses and Fair Value

	Less than 12 months		12 months or more		Total	
(in millions)	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
December 31, 2017						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	**$ (27)**	**4,065**	**(81)**	**2,209**	**(108)**	**6,274**
Securities of U.S. states and political subdivisions	**(17)**	**6,179**	**(422)**	**11,766**	**(439)**	**17,945**
Mortgage-backed securities:						
Federal agencies	**(243)**	**52,559**	**(1,029)**	**44,691**	**(1,272)**	**97,250**
Residential	**(1)**	**47**	**(1)**	**58**	**(2)**	**105**
Commercial	**(1)**	**101**	**(1)**	**133**	**(2)**	**234**
Total mortgage-backed securities	**(245)**	**52,707**	**(1,031)**	**44,882**	**(1,276)**	**97,589**
Corporate debt securities	**(4)**	**239**	**(36)**	**503**	**(40)**	**742**
Collateralized loan and other debt obligations	**(1)**	**373**	**(2)**	**146**	**(3)**	**519**
Other	**(1)**	**37**	**(4)**	**483**	**(5)**	**520**
Total debt securities	**(295)**	**63,600**	**(1,576)**	**59,989**	**(1,871)**	**123,589**
Marketable equity securities:						
Perpetual preferred securities	**(1)**	**62**	**(8)**	**78**	**(9)**	**140**
Other marketable equity securities	**(8)**	**53**	**—**	**—**	**(8)**	**53**
Total marketable equity securities	**(9)**	**115**	**(8)**	**78**	**(17)**	**193**
Total available-for-sale securities	**(304)**	**63,715**	**(1,584)**	**60,067**	**(1,888)**	**123,782**
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	**(69)**	**11,255**	**(34)**	**1,490**	**(103)**	**12,745**
Securities of U.S. states and political subdivisions	**(5)**	**500**	**(38)**	**1,683**	**(43)**	**2,183**
Federal agency and other mortgage-backed securities	**(198)**	**29,713**	**(484)**	**28,244**	**(682)**	**57,957**
Collateralized loan obligations	**—**	**—**	**—**	**—**	**—**	**—**
Other	**—**	**—**	**—**	**—**	**—**	**—**
Total held-to-maturity securities	**(272)**	**41,468**	**(556)**	**31,417**	**(828)**	**72,885**
Total	**$ (576)**	**105,183**	**(2,140)**	**91,484**	**(2,716)**	**196,667**
December 31, 2016						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	$ (109)	10,816	—	—	(109)	10,816
Securities of U.S. states and political subdivisions	(341)	17,412	(1,230)	16,213	(1,571)	33,625
Mortgage-backed securities:						
Federal agencies	(3,338)	120,735	(120)	3,481	(3,458)	124,216
Residential	(4)	527	(4)	245	(8)	772
Commercial	(43)	1,459	(31)	1,690	(74)	3,149
Total mortgage-backed securities	(3,385)	122,721	(155)	5,416	(3,540)	128,137
Corporate debt securities	(11)	946	(99)	1,229	(110)	2,175
Collateralized loan and other debt obligations	(2)	1,899	(29)	3,197	(31)	5,096
Other	(9)	971	(26)	1,262	(35)	2,233
Total debt securities	(3,857)	154,765	(1,539)	27,317	(5,396)	182,082
Marketable equity securities:						
Perpetual preferred securities	(3)	41	(8)	45	(11)	86
Other marketable equity securities	—	—	—	—	—	—
Total marketable equity securities	(3)	41	(8)	45	(11)	86
Total available-for-sale securities	(3,860)	154,806	(1,547)	27,362	(5,407)	182,168
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	(77)	6,351	—	—	(77)	6,351
Securities of U.S. states and political subdivisions	(144)	4,871	—	—	(144)	4,871
Federal agency and other mortgage-backed securities	(804)	40,095	—	—	(804)	40,095
Collateralized loan obligations	—	—	(1)	266	(1)	266
Other	—	—	(1)	633	(1)	633
Total held-to-maturity securities	(1,025)	51,317	(2)	899	(1,027)	52,216
Total	$ (4,885)	206,123	(1,549)	28,261	(6,434)	234,384

We have assessed each security with gross unrealized losses included in the previous table for credit impairment. As part of that assessment we evaluated and concluded that we do not intend to sell any of the securities and that it is more likely than not that we will not be required to sell prior to recovery of the amortized cost basis. For debt securities, we evaluate, where necessary, whether credit impairment exists by comparing the present value of the expected cash flows to the securities' amortized cost basis. For equity securities, we consider numerous factors in determining whether impairment exists, including our intent and ability to hold the securities for a period of time sufficient to recover the cost basis of the securities.

For descriptions of the factors we consider when analyzing securities for impairment, see Note 1 (Summary of Significant Accounting Policies) and below.

SECURITIES OF U.S. TREASURY AND FEDERAL AGENCIES AND FEDERAL AGENCY MORTGAGE-BACKED SECURITIES (MBS) The unrealized losses associated with U.S. Treasury and federal agency securities and federal agency MBS are generally driven by changes in interest rates and not due to credit losses given the explicit or implicit guarantees provided by the U.S. government.

SECURITIES OF U.S. STATES AND POLITICAL SUBDIVISIONS The unrealized losses associated with securities of U.S. states and political subdivisions are usually driven by changes in the relationship between municipal and term funding credit curves rather than by changes to the credit quality of the underlying securities. Substantially all of these investments with unrealized losses are investment grade. The securities were generally underwritten in accordance with our own investment standards prior to the decision to purchase. Some of these securities are guaranteed by a bond insurer, but we did not rely on this guarantee when making our investment decision. These investments will continue to be monitored as part of our ongoing impairment analysis but are expected to perform, even if the rating agencies reduce the credit rating of the bond insurers. As a result, we expect to recover the entire amortized cost basis of these securities.

RESIDENTIAL AND COMMERCIAL MBS The unrealized losses associated with private residential MBS and commercial MBS are generally driven by changes in projected collateral losses, credit spreads and interest rates. We assess for credit impairment by estimating the present value of expected cash flows. The key assumptions for determining expected cash flows include default rates, loss severities and/or prepayment rates. We estimate security losses by forecasting the underlying mortgage loans in each transaction. We use forecasted loan performance to project cash flows to the various tranches in the structure. We also consider cash flow forecasts and, as applicable, independent industry analyst reports and forecasts, sector credit ratings, and other independent market data. Based upon our assessment of the expected credit losses and the credit enhancement level of the securities, we expect to recover the entire amortized cost basis of these securities.

CORPORATE DEBT SECURITIES The unrealized losses associated with corporate debt securities are predominantly related to unsecured debt obligations issued by various corporations. We evaluate the financial performance of each issuer on a quarterly basis to determine if the issuer can make all contractual principal and interest payments. Based upon this assessment, we expect to recover the entire amortized cost basis of these securities.

COLLATERALIZED LOAN AND OTHER DEBT OBLIGATIONS The unrealized losses associated with collateralized loan and other debt obligations relate to securities predominantly backed by commercial collateral. The unrealized losses are typically driven by changes in projected collateral losses, credit spreads and interest rates. We assess for credit impairment by estimating the present value of expected cash flows. The key assumptions for determining expected cash flows include default rates, loss severities and prepayment rates. We also consider cash flow forecasts and, as applicable, independent industry analyst reports and forecasts, sector credit ratings, and other independent market data. Based upon our assessment of the expected credit losses and the credit enhancement level of the securities, we expect to recover the entire amortized cost basis of these securities.

OTHER DEBT SECURITIES The unrealized losses associated with other debt securities predominantly relate to other asset-backed securities. The losses are usually driven by changes in projected collateral losses, credit spreads and interest rates. We assess for credit impairment by estimating the present value of expected cash flows. The key assumptions for determining expected cash flows include default rates, loss severities and prepayment rates. Based upon our assessment of the expected credit losses and the credit enhancement level of the securities, we expect to recover the entire amortized cost basis of these securities.

MARKETABLE EQUITY SECURITIES Our marketable equity securities include investments in perpetual preferred securities, which provide attractive tax-equivalent yields. We evaluate these hybrid financial instruments with investment-grade ratings for impairment using an evaluation methodology similar to the approach used for debt securities. Perpetual preferred securities are not considered to be other-than-temporarily impaired if there is no evidence of credit deterioration or investment rating downgrades of any issuers to below investment grade, and we expect to continue to receive full contractual payments. We will continue to evaluate the prospects for these securities for recovery in their market value in accordance with our policy for estimating OTTI. We have recorded impairment write-downs on perpetual preferred securities where there was evidence of credit deterioration.

OTHER INVESTMENT SECURITIES MATTERS The fair values of our investment securities could decline in the future if the underlying performance of the collateral for the residential and commercial MBS or other securities deteriorate, and our credit enhancement levels do not provide sufficient protection to our contractual principal and interest. As a result, there is a risk that significant OTTI may occur in the future.

Table 5.3 shows the gross unrealized losses and fair value of debt and perpetual preferred investment securities by those rated investment grade and those rated less than investment grade, according to their lowest credit rating by Standard & Poor's Rating Services (S&P) or Moody's Investors Service (Moody's). Credit ratings express opinions about the credit quality of a security. Securities rated investment grade, that is those rated BBB- or higher by S&P or Baa3 or higher by Moody's, are generally considered by the rating agencies and market participants to be low credit risk. Conversely, securities rated below investment grade, labeled as "speculative grade" by the rating agencies, are considered to be distinctively higher credit risk than investment grade securities. We have also included securities not rated by S&P or Moody's in the table below based on our internal credit grade of the securities (used for credit risk management purposes) equivalent to the credit rating assigned by major credit agencies. The unrealized losses and fair value of unrated securities categorized as investment grade based on internal credit grades were $32 million and $6.9 billion, respectively, at December 31, 2017, and $54 million and $7.0 billion, respectively, at December 31, 2016. If an internal credit grade was not assigned, we categorized the security as non-investment grade.

Table 5.3: Gross Unrealized Losses and Fair Value by Investment Grade

	Investment grade		Non-investment grade	
(in millions)	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
December 31, 2017				
Available-for-sale securities:				
Securities of U.S. Treasury and federal agencies	**$ (108)**	**6,274**	**—**	**—**
Securities of U.S. states and political subdivisions	**(412)**	**17,763**	**(27)**	**182**
Mortgage-backed securities:				
Federal agencies	**(1,272)**	**97,250**	**—**	**—**
Residential	**(1)**	**42**	**(1)**	**63**
Commercial	**(1)**	**183**	**(1)**	**51**
Total mortgage-backed securities	**(1,274)**	**97,475**	**(2)**	**114**
Corporate debt securities	**(13)**	**304**	**(27)**	**438**
Collateralized loan and other debt obligations	**(3)**	**519**	**—**	**—**
Other	**(2)**	**469**	**(3)**	**51**
Total debt securities	**(1,812)**	**122,804**	**(59)**	**785**
Perpetual preferred securities	**(8)**	**122**	**(1)**	**18**
Total available-for-sale securities	**(1,820)**	**122,926**	**(60)**	**803**
Held-to-maturity securities:				
Securities of U.S. Treasury and federal agencies	**(103)**	**12,745**	**—**	**—**
Securities of U.S. states and political subdivisions	**(43)**	**2,183**	**—**	**—**
Federal agency and other mortgage-backed securities	**(680)**	**57,789**	**(2)**	**168**
Collateralized loan obligations	**—**	**—**	**—**	**—**
Other	**—**	**—**	**—**	**—**
Total held-to-maturity securities	**(826)**	**72,717**	**(2)**	**168**
Total	**$ (2,646)**	**195,643**	**(62)**	**971**
December 31, 2016				
Available-for-sale securities:				
Securities of U.S. Treasury and federal agencies	$ (109)	10,816	—	—
Securities of U.S. states and political subdivisions	(1,517)	33,271	(54)	354
Mortgage-backed securities:				
Federal agencies	(3,458)	124,216	—	—
Residential	(1)	176	(7)	596
Commercial	(15)	2,585	(59)	564
Total mortgage-backed securities	(3,474)	126,977	(66)	1,160
Corporate debt securities	(31)	1,238	(79)	937
Collateralized loan and other debt obligations	(31)	5,096	—	—
Other	(30)	1,842	(5)	391
Total debt securities	(5,192)	179,240	(204)	2,842
Perpetual preferred securities	(10)	68	(1)	18
Total available-for-sale securities	(5,202)	179,308	(205)	2,860
Held-to-maturity securities:				
Securities of U.S. Treasury and federal agencies	(77)	6,351	—	—
Securities of U.S. states and political subdivisions	(144)	4,871	—	—
Federal agency and other mortgage-backed securities	(803)	40,078	(1)	17
Collateralized loan obligations	(1)	266	—	—
Other	(1)	633	—	—
Total held-to-maturity securities	(1,026)	52,199	(1)	17
Total	$ (6,228)	231,507	(206)	2,877

Contractual Maturities

Table 5.4 shows the remaining contractual maturities and contractual weighted-average yields (taxable-equivalent basis) of available-for-sale debt securities. The remaining contractual principal maturities for MBS do not consider prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay obligations before the underlying mortgages mature.

Table 5.4: Contractual Maturities

			Remaining contractual maturity							
	Total		Within one year		After one year through five years		After five years through ten years		After ten years	
(in millions)	amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
December 31, 2017										
Available-for-sale debt securities (1):										
Fair value:										
Securities of U.S. Treasury and federal agencies	**$ 6,319**	**1.59%**	**$ 81**	**1.37%**	**$ 6,189**	**1.59%**	**$ 49**	**1.89%**	**$ —**	**—%**
Securities of U.S. states and political subdivisions	**51,326**	**5.88**	**2,380**	**3.47**	**9,484**	**3.42**	**2,276**	**4.63**	**37,186**	**6.75**
Mortgage-backed securities:										
Federal agencies	**160,219**	**3.27**	**15**	**2.03**	**210**	**3.08**	**5,534**	**2.82**	**154,460**	**3.28**
Residential	**4,608**	**3.52**	**—**	**—**	**24**	**5.67**	**11**	**2.46**	**4,573**	**3.51**
Commercial	**4,565**	**3.45**	**—**	**—**	**—**	**—**	**166**	**2.69**	**4,399**	**3.48**
Total mortgage-backed securities	**169,392**	**3.28**	**15**	**2.03**	**234**	**3.35**	**5,711**	**2.82**	**163,432**	**3.30**
Corporate debt securities	**7,666**	**5.12**	**443**	**5.54**	**2,738**	**5.56**	**3,549**	**4.70**	**936**	**5.26**
Collateralized loan and other debt obligations	**36,056**	**2.98**	**—**	**—**	**50**	**1.68**	**15,008**	**2.96**	**20,998**	**3.00**
Other	**5,648**	**2.46**	**71**	**3.56**	**463**	**2.72**	**1,466**	**2.13**	**3,648**	**2.53**
Total available-for-sale debt securities at fair value	**$ 276,407**	**3.72%**	**$ 2,990**	**3.70%**	**$ 19,158**	**3.11%**	**$ 28,059**	**3.24%**	**$226,200**	**3.83%**
December 31, 2016										
Available-for-sale debt securities (1):										
Fair value:										
Securities of U.S. Treasury and federal agencies	$ 25,819	1.44 %	$ 1,328	0.92 %	$ 23,477	1.45 %	$ 1,014	1.80 %	$ —	— %
Securities of U.S. states and political subdivisions	51,101	5.65	2,990	1.69	9,299	2.74	2,391	4.71	36,421	6.78
Mortgage-backed securities:										
Federal agencies	161,230	3.09	—	—	128	2.98	5,363	3.16	155,739	3.09
Residential	7,816	3.84	—	—	25	5.21	35	4.34	7,756	3.83
Commercial	8,502	4.58	—	—	—	—	30	3.13	8,472	4.59
Total mortgage-backed securities	177,548	3.19	—	—	153	3.34	5,428	3.16	171,967	3.19
Corporate debt securities	11,457	4.81	2,043	2.90	3,374	5.89	4,741	4.71	1,299	5.38
Collateralized loan and other debt obligations	35,020	2.70	—	—	168	1.34	16,482	2.66	18,370	2.74
Other	6,208	2.18	57	3.06	971	2.35	1,146	2.04	4,034	2.17
Total available-for-sale debt securities at fair value	$ 307,153	3.44 %	$ 6,418	1.93 %	$ 37,442	2.20 %	$ 31,202	3.17 %	$ 232,091	3.72 %

(1) Weighted-average yields displayed by maturity bucket are weighted based on fair value and predominantly represent contractual coupon rates without effect for any related hedging derivatives.

Table 5.5 shows the amortized cost and weighted-average yields of held-to-maturity debt securities by contractual maturity.

Table 5.5: Amortized Cost by Contractual Maturity

			Remaining contractual maturity							
	Total		Within one year		After one year through five years		After five years through ten years		After ten years	
(in millions)	amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
December 31, 2017										
Held-to-maturity securities (1):										
Amortized cost:										
Securities of U.S. Treasury and federal agencies	**$ 44,720**	**2.12%**	**$ —**	**—%**	**$ 32,330**	**2.04%**	**$ 12,390**	**2.32%**	**$ —**	**—%**
Securities of U.S. states and political subdivisions	**6,313**	**6.02**	**—**	**—**	**50**	**7.18**	**695**	**6.31**	**5,568**	**5.98**
Federal agency and other mortgage-backed securities	**87,527**	**3.11**	**—**	**—**	**15**	**2.81**	**11**	**2.49**	**87,501**	**3.11**
Collateralized loan obligations	**661**	**2.86**	**—**	**—**	**—**	**—**	**661**	**2.86**	**—**	**—**
Other	**114**	**1.83**	**—**	**—**	**114**	**1.83**	**—**	**—**	**—**	**—**
Total held-to-maturity debt securities at amortized cost	**$ 139,335**	**2.92%**	**$ —**	**—%**	**$ 32,509**	**2.05%**	**$ 13,757**	**2.55%**	**$ 93,069**	**3.28%**
December 31, 2016										
Held-to-maturity securities (1):										
Amortized cost:										
Securities of U.S. Treasury and federal agencies	$ 44,690	2.12 %	$ —	— %	$ 31,956	2.05 %	$ 12,734	2.30 %	$ —	— %
Securities of U.S. states and political subdivisions	6,336	6.04	—	—	24	8.20	436	6.76	5,876	5.98
Federal agency and other mortgage-backed securities	45,161	3.23	—	—	—	—	—	—	45,161	3.23
Collateralized loan obligations	1,065	2.58	—	—	—	—	1,065	2.58	—	—
Other	2,331	1.83	—	—	1,683	1.81	648	1.89	—	—
Total held-to-maturity debt securities at amortized cost	$ 99,583	2.87 %	$ —	— %	$ 33,663	2.04 %	$ 14,883	2.43 %	$ 51,037	3.55 %

(1) Weighted-average yields displayed by maturity bucket are weighted based on amortized cost and predominantly represent contractual coupon rates.

Table 5.6 shows the fair value of held-to-maturity debt securities by contractual maturity.

Table 5.6: Fair Value by Contractual Maturity

		Remaining contractual maturity			
	Total	Within one year	After one year through five years	After five years through ten years	After ten years
(in millions)	amount	Amount	Amount	Amount	Amount
December 31, 2017					
Held-to-maturity securities:					
Fair value:					
Securities of U.S. Treasury and federal agencies	**$ 44,806**	**—**	**32,388**	**12,418**	**—**
Securities of U.S. states and political subdivisions	**6,354**	**—**	**49**	**701**	**5,604**
Federal agency and other mortgage-backed securities	**87,046**	**—**	**15**	**11**	**87,020**
Collateralized loan obligations	**665**	**—**	**—**	**665**	**—**
Other	**114**	**—**	**114**	**—**	**—**
Total held-to-maturity debt securities at fair value	**$ 138,985**	**—**	**32,566**	**13,795**	**92,624**
December 31, 2016					
Held-to-maturity securities:					
Fair value:					
Securities of U.S. Treasury and federal agencies	$ 45,079	—	32,313	12,766	—
Securities of U.S. states and political subdivisions	6,209	—	24	430	5,755
Federal agency and other mortgage-backed securities	44,457	—	—	—	44,457
Collateralized loan obligations	1,070	—	—	1,070	—
Other	2,340	—	1,688	652	—
Total held-to-maturity debt securities at fair value	$ 99,155	—	34,025	14,918	50,212

Note 5: Investment Securities *(continued)*

Realized Gains and Losses

Table 5.7 shows the gross realized gains and losses on sales and OTTI write-downs related to the available-for-sale securities portfolio, which includes marketable equity securities, as well as net realized gains and losses on nonmarketable equity investments (see Note 7 (Premises, Equipment, Lease Commitments and Other Assets)).

Table 5.7: Realized Gains and Losses

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Gross realized gains	**$ 1,409**	1,542	1,775
Gross realized losses	**(207)**	(106)	(67)
OTTI write-downs	**(267)**	(194)	(185)
Net realized gains from available-for-sale securities	**935**	1,242	1,523
Net realized gains from nonmarketable equity investments	**812**	579	1,659
Net realized gains from debt securities and equity investments	**$ 1,747**	1,821	3,182

Other-Than-Temporary Impairment

Table 5.8 shows the detail of total OTTI write-downs included in earnings for available-for-sale debt securities, marketable equity securities and nonmarketable equity investments. There were no OTTI write-downs on held-to-maturity securities during the years ended December 31, 2017, 2016 or 2015.

Table 5.8: OTTI Write-downs

	Year ended December 31,		
(in millions)	**2017**	2016	2015
OTTI write-downs included in earnings			
Debt securities:			
Securities of U.S. states and political subdivisions	**$ 150**	63	18
Mortgage-backed securities:			
Residential	**11**	34	54
Commercial	**80**	14	4
Corporate debt securities	**21**	72	105
Other debt securities	**—**	6	2
Total debt securities	**262**	189	183
Equity securities:			
Marketable equity securities:			
Other marketable equity securities	**5**	5	2
Total marketable equity securities	**5**	5	2
Total investment securities (1)	**267**	194	185
Nonmarketable equity investments (1)	**339**	448	374
Total OTTI write-downs included in earnings (1)	**$ 606**	642	559

(1) The years ended December 31, 2017, 2016 and 2015, include $86 million, $258 million and $287 million, respectively, in OTTI write-downs of oil and gas investments, of which $24 million, $88 million and $104 million, respectively, related to investment securities and $62 million, $170 million and $183 million, respectively, related to nonmarketable equity investments.

Other-Than-Temporarily Impaired Debt Securities

Table 5.9 shows the detail of OTTI write-downs on available-for-sale debt securities included in earnings and the related changes in OCI for the same securities.

Table 5.9: OTTI Write-downs Included in Earnings

	Year ended December 31,		
(in millions)	**2017**	2016	2015
OTTI on debt securities			
Recorded as part of gross realized losses:			
Credit-related OTTI	**$ 119**	143	169
Intent-to-sell OTTI	**143**	46	14
Total recorded as part of gross realized losses	**262**	189	183
Changes to OCI for losses (reversal of losses) in non-credit-related OTTI (1):			
Securities of U.S. states and political subdivisions	**(5)**	8	(1)
Residential mortgage-backed securities	**(1)**	(3)	(42)
Commercial mortgage-backed securities	**(51)**	24	(16)
Corporate debt securities	**1**	(13)	12
Other debt securities	**(1)**	2	—
Total changes to OCI for non-credit-related OTTI	**(57)**	18	(47)
Total OTTI losses recorded on debt securities	**$ 205**	207	136

(1) Represents amounts recorded to OCI for impairment, due to factors other than credit, on debt securities that have also had credit-related OTTI write-downs during the period. Increases represent initial or subsequent non-credit-related OTTI on debt securities. Decreases represent partial to full reversal of impairment due to recoveries in the fair value of securities due to non-credit factors.

Table 5.10 presents a rollforward of the OTTI credit loss that has been recognized in earnings as a write-down of available-for-sale debt securities we still own (referred to as "credit-impaired" debt securities) and do not intend to sell. Recognized credit loss represents the difference between the present value of expected future cash flows discounted using the security's current effective interest rate and the amortized cost basis of the security prior to considering credit loss.

Table 5.10: Rollforward of OTTI Credit Loss

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Credit loss recognized, beginning of year	**$ 1,043**	1,092	1,025
Additions:			
For securities with initial credit impairments	**9**	85	102
For securities with previous credit impairments	**110**	58	67
Total additions	**119**	143	169
Reductions:			
For securities sold, matured, or intended/required to be sold	**(414)**	(184)	(93)
For recoveries of previous credit impairments (1)	**(6)**	(8)	(9)
Total reductions	**(420)**	(192)	(102)
Credit loss recognized, end of year	**$ 742**	1,043	1,092

(1) Recoveries of previous credit impairments result from increases in expected cash flows subsequent to credit loss recognition. Such recoveries are reflected prospectively as interest yield adjustments using the effective interest method.

Note 6: Loans and Allowance for Credit Losses

Table 6.1 presents total loans outstanding by portfolio segment and class of financing receivable. Outstanding balances include a total net reduction of $3.9 billion and $4.4 billion at December 31, 2017 and 2016, respectively, for unearned income, net deferred loan fees, and unamortized discounts and premiums.

Table 6.1: Loans Outstanding

					December 31,
(in millions)	**2017**	2016	2015	2014	2013
Commercial:					
Commercial and industrial	**$ 333,125**	330,840	299,892	271,795	235,358
Real estate mortgage	**126,599**	132,491	122,160	111,996	112,427
Real estate construction	**24,279**	23,916	22,164	18,728	16,934
Lease financing	**19,385**	19,289	12,367	12,307	12,371
Total commercial	**503,388**	506,536	456,583	414,826	377,090
Consumer:					
Real estate 1-4 family first mortgage	**284,054**	275,579	273,869	265,386	258,507
Real estate 1-4 family junior lien mortgage	**39,713**	46,237	53,004	59,717	65,950
Credit card	**37,976**	36,700	34,039	31,119	26,882
Automobile	**53,371**	62,286	59,966	55,740	50,808
Other revolving credit and installment	**38,268**	40,266	39,098	35,763	43,049
Total consumer	**453,382**	461,068	459,976	447,725	445,196
Total loans	**$ 956,770**	967,604	916,559	862,551	822,286

Our foreign loans are reported by respective class of financing receivable in the table above. Substantially all of our foreign loan portfolio is commercial loans. Loans are classified as foreign primarily based on whether the borrower's primary address is outside of the United States. Table 6.2 presents total commercial foreign loans outstanding by class of financing receivable.

Table 6.2: Commercial Foreign Loans Outstanding

					December 31,
(in millions)	**2017**	2016	2015	2014	2013
Commercial foreign loans:					
Commercial and industrial	**$ 60,106**	55,396	49,049	44,707	41,547
Real estate mortgage	**8,033**	8,541	8,350	4,776	5,328
Real estate construction	**655**	375	444	218	187
Lease financing	**1,126**	972	274	336	338
Total commercial foreign loans	**$ 69,920**	65,284	58,117	50,037	47,400

Loan Concentrations

Loan concentrations may exist when there are amounts loaned to borrowers engaged in similar activities or similar types of loans extended to a diverse group of borrowers that would cause them to be similarly impacted by economic or other conditions. At December 31, 2017 and 2016, we did not have concentrations representing 10% or more of our total loan portfolio in domestic commercial and industrial loans and lease financing by industry or CRE loans (real estate mortgage and real estate construction) by state or property type. Real estate 1-4 family non-PCI mortgage loans to borrowers in the state of California represented 12% of total loans at December 31, 2017, compared with 11% at December 31, 2016, and PCI loans were under 1% in both years. These California loans are generally diversified among the larger metropolitan areas in California, with no single area consisting of more than 4% of total loans. We continuously monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our real estate 1-4 family mortgage portfolio as part of our credit risk management process.

Some of our real estate 1-4 family first and junior lien mortgage loans include an interest-only feature as part of the loan terms. These interest-only loans were approximately 4% of total loans at December 31, 2017, and 7% at December 31, 2016. Substantially all of these interest-only loans at origination were considered to be prime or near prime. We do not offer option adjustable-rate mortgage (ARM) products, nor do we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans. We acquired an option payment loan portfolio (Pick-a-Pay) from Wachovia at December 31, 2008. A majority of the portfolio was identified as PCI loans. Since the acquisition, we have reduced our exposure to the option payment portion of the portfolio through our modification efforts and loss mitigation actions. At December 31, 2017, approximately 1% of total loans remained with the payment option feature compared with 10% at December 31, 2008.

Our first and junior lien lines of credit products generally have draw periods of 10, 15 or 20 years, with variable interest rate and payment options during the draw period of (1) interest only or (2) 1.5% of total outstanding balance plus accrued interest. During the draw period, the borrower has the option of converting all or a portion of the line from a variable interest rate to a fixed rate with terms including interest-only payments for a fixed period between three to seven years or a fully amortizing payment with a fixed period between five to 30 years. At the end of the draw period, a line of credit generally converts to an amortizing payment schedule with repayment terms of up to 30 years based on the balance at time of conversion. At December 31, 2017, our lines of credit portfolio had an outstanding balance of $49.9 billion, of which $12.3 billion, or 25%, is in its amortization period, another $3.0 billion, or 6%, of our total outstanding balance, will reach their end of draw period during 2018 through 2019, $9.3 billion, or 19%, during 2020 through 2022, and $25.3 billion, or 50%, will convert in subsequent years. This portfolio had unfunded credit commitments of $62.3 billion at December 31, 2017. The lines that enter their amortization period may experience higher delinquencies and higher loss rates than the lines in their draw period. At December 31, 2017, $575 million, or 5%, of outstanding lines of credit that are in their amortization period were 30 or more days past due, compared with $690 million, or 2%, for lines in their draw period. We have considered this increased inherent risk in our allowance for credit loss estimate. In anticipation of our borrowers reaching the end of their contractual commitment, we have created a program to inform, educate and help these borrowers transition from interest-only to fully-amortizing payments or full repayment. We monitor the performance of the borrowers moving through the program in an effort to refine our ongoing program strategy.

Loan Purchases, Sales, and Transfers

Table 6.3 summarizes the proceeds paid or received for purchases and sales of loans and transfers from loans held for investment to mortgages/loans held for sale at lower of cost or fair value. This loan activity primarily includes loans purchased and sales of whole loan or participating interests, whereby we receive or transfer a portion of a loan after origination. The table excludes PCI loans and loans recorded at fair value, including loans originated for sale because their loan activity normally does not impact the allowance for credit losses.

Table 6.3: Loan Purchases, Sales, and Transfers

						Year ended December 31,
			2017			2016
(in millions)	**Commercial**	**Consumer (1)**	**Total**	Commercial (2)	Consumer (1)	Total
Purchases	**$ 3,675**	**2**	**3,677**	32,710	5	32,715
Sales	**(2,066)**	**(425)**	**(2,491)**	(1,334)	(1,486)	(2,820)
Transfers to MHFS/LHFS	**(736)**	**(2)**	**(738)**	(306)	(6)	(312)

(1) Excludes activity in government insured/guaranteed real estate 1-4 family first mortgage loans. As servicer, we are able to buy delinquent insured/guaranteed loans out of the Government National Mortgage Association (GNMA) pools, and manage and/or resell them in accordance with applicable requirements. These loans are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Accordingly, these loans have limited impact on the allowance for loan losses.
(2) Purchases include loans and capital leases from the 2016 GE Capital business acquisitions.

Commitments to Lend

A commitment to lend is a legally binding agreement to lend funds to a customer, usually at a stated interest rate, if funded, and for specific purposes and time periods. We generally require a fee to extend such commitments. Certain commitments are subject to loan agreements with covenants regarding the financial performance of the customer or borrowing base formulas on an ongoing basis that must be met before we are required to fund the commitment. We may reduce or cancel consumer commitments, including home equity lines and credit card lines, in accordance with the contracts and applicable law.

We may, as a representative for other lenders, advance funds or provide for the issuance of letters of credit under syndicated loan or letter of credit agreements. Any advances are generally repaid in less than a week and would normally require default of both the customer and another lender to expose us to loss. These temporary advance arrangements totaled approximately $85 billion at December 31, 2017, and $77 billion at December 31, 2016.

We issue commercial letters of credit to assist customers in purchasing goods or services, typically for international trade. At December 31, 2017 and 2016, we had $982 million and $1.1 billion, respectively, of outstanding issued commercial letters of credit. We also originate multipurpose lending commitments under which borrowers have the option to draw on the facility for different purposes in one of several forms, including a standby letter of credit. See Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments) for additional information on standby letters of credit.

When we make commitments, we are exposed to credit risk. The maximum credit risk for these commitments will generally be lower than the contractual amount because a significant portion of these commitments are expected to expire without being used by the customer. In addition, we manage the potential risk in commitments to lend by limiting the total amount of commitments, both by individual customer and in total, by monitoring the size and maturity structure of these commitments and by applying the same credit standards for these commitments as for all of our credit activities.

For loans and commitments to lend, we generally require collateral or a guarantee. We may require various types of collateral, including commercial and consumer real estate, automobiles, other short-term liquid assets such as accounts receivable or inventory and long-lived assets, such as equipment and other business assets. Collateral requirements for each loan or commitment may vary based on the loan product and our assessment of a customer's credit risk according to the specific credit underwriting, including credit terms and structure.

The contractual amount of our unfunded credit commitments, including unissued standby and commercial letters of credit, is summarized by portfolio segment and class of financing receivable in Table 6.4. The table excludes the issued standby and commercial letters of credit and temporary advance arrangements described above.

Table 6.4: Unfunded Credit Commitments

(in millions)	**Dec 31, 2017**	Dec 31, 2016
Commercial:		
Commercial and industrial	**$326,626**	319,662
Real estate mortgage	**7,485**	7,833
Real estate construction	**16,621**	18,840
Lease financing	**—**	16
Total commercial	**350,732**	346,351
Consumer:		
Real estate 1-4 family first mortgage	**29,876**	33,498
Real estate 1-4 family junior lien mortgage	**38,897**	41,431
Credit card	**108,465**	101,895
Other revolving credit and installment	**27,541**	28,349
Total consumer	**204,779**	205,173
Total unfunded credit commitments	**$555,511**	551,524

Allowance for Credit Losses

Table 6.5 presents the allowance for credit losses, which consists of the allowance for loan losses and the allowance for unfunded credit commitments.

Table 6.5: Allowance for Credit Losses

				Year ended December 31,	
(in millions)	**2017**	2016	2015	2014	2013
Balance, beginning of year	**$ 12,540**	12,512	13,169	14,971	17,477
Provision for credit losses	**2,528**	3,770	2,442	1,395	2,309
Interest income on certain impaired loans (1)	**(186)**	(205)	(198)	(211)	(264)
Loan charge-offs:					
Commercial:					
Commercial and industrial	**(789)**	(1,419)	(734)	(627)	(739)
Real estate mortgage	**(38)**	(27)	(59)	(66)	(190)
Real estate construction	**—**	(1)	(4)	(9)	(28)
Lease financing	**(45)**	(41)	(14)	(15)	(34)
Total commercial	**(872)**	(1,488)	(811)	(717)	(991)
Consumer:					
Real estate 1-4 family first mortgage	**(240)**	(452)	(507)	(721)	(1,439)
Real estate 1-4 family junior lien mortgage	**(279)**	(495)	(635)	(864)	(1,579)
Credit card	**(1,481)**	(1,259)	(1,116)	(1,025)	(1,022)
Automobile	**(1,002)**	(845)	(742)	(729)	(625)
Other revolving credit and installment	**(713)**	(708)	(643)	(668)	(754)
Total consumer	**(3,715)**	(3,759)	(3,643)	(4,007)	(5,419)
Total loan charge-offs	**(4,587)**	(5,247)	(4,454)	(4,724)	(6,410)
Loan recoveries:					
Commercial:					
Commercial and industrial	**297**	263	252	369	396
Real estate mortgage	**82**	116	127	160	226
Real estate construction	**30**	38	37	136	137
Lease financing	**17**	11	8	8	17
Total commercial	**426**	428	424	673	776
Consumer:					
Real estate 1-4 family first mortgage	**288**	373	245	212	246
Real estate 1-4 family junior lien mortgage	**266**	266	259	238	269
Credit card	**239**	207	175	161	127
Automobile	**319**	325	325	349	322
Other revolving credit and installment	**121**	128	134	146	161
Total consumer	**1,233**	1,299	1,138	1,106	1,125
Total loan recoveries	**1,659**	1,727	1,562	1,779	1,901
Net loan charge-offs	**(2,928)**	(3,520)	(2,892)	(2,945)	(4,509)
Other	**6**	(17)	(9)	(41)	(42)
Balance, end of year	**$ 11,960**	12,540	12,512	13,169	14,971
Components:					
Allowance for loan losses	**$ 11,004**	11,419	11,545	12,319	14,502
Allowance for unfunded credit commitments	**956**	1,121	967	850	469
Allowance for credit losses	**$ 11,960**	12,540	12,512	13,169	14,971
Net loan charge-offs as a percentage of average total loans	**0.31%**	0.37	0.33	0.35	0.56
Allowance for loan losses as a percentage of total loans	**1.15**	1.18	1.26	1.43	1.76
Allowance for credit losses as a percentage of total loans	**1.25**	1.30	1.37	1.53	1.82

(1) Certain impaired loans with an allowance calculated by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Table 6.6 summarizes the activity in the allowance for credit losses by our commercial and consumer portfolio segments.

Table 6.6: Allowance Activity by Portfolio Segment

	Year ended December 31,					
			2017			2016
(in millions)	**Commercial**	**Consumer**	**Total**	Commercial	Consumer	Total
Balance, beginning of year	**$ 7,394**	**5,146**	**12,540**	6,872	5,640	12,512
Provision (reversal of provision) for credit losses	**(261)**	**2,789**	**2,528**	1,644	2,126	3,770
Interest income on certain impaired loans	**(59)**	**(127)**	**(186)**	(45)	(160)	(205)
Loan charge-offs	**(872)**	**(3,715)**	**(4,587)**	(1,488)	(3,759)	(5,247)
Loan recoveries	**426**	**1,233**	**1,659**	428	1,299	1,727
Net loan charge-offs	**(446)**	**(2,482)**	**(2,928)**	(1,060)	(2,460)	(3,520)
Other	**4**	**2**	**6**	(17)	—	(17)
Balance, end of year	**$ 6,632**	**5,328**	**11,960**	7,394	5,146	12,540

Table 6.7 disaggregates our allowance for credit losses and recorded investment in loans by impairment methodology.

Table 6.7: Allowance by Impairment Methodology

	Allowance for credit losses			Recorded investment in loans		
(in millions)	Commercial	Consumer	Total	Commercial	Consumer	Total
December 31, 2017						
Collectively evaluated (1)	**$ 5,927**	**4,143**	**10,070**	**499,342**	**425,919**	**925,261**
Individually evaluated (2)	**705**	**1,185**	**1,890**	**3,960**	**14,714**	**18,674**
PCI (3)	**—**	**—**	**—**	**86**	**12,749**	**12,835**
Total	**$ 6,632**	**5,328**	**11,960**	**503,388**	**453,382**	**956,770**
December 31, 2016						
Collectively evaluated (1)	$ 6,392	3,553	9,945	500,487	428,009	928,496
Individually evaluated (2)	1,000	1,593	2,593	5,372	17,005	22,377
PCI (3)	2	—	2	677	16,054	16,731
Total	$ 7,394	5,146	12,540	506,536	461,068	967,604

(1) Represents loans collectively evaluated for impairment in accordance with Accounting Standards Codification (ASC) 450-20, *Loss Contingencies* (formerly FAS 5), and pursuant to amendments by ASU 2010-20 regarding allowance for non-impaired loans.
(2) Represents loans individually evaluated for impairment in accordance with ASC 310-10, *Receivables* (formerly FAS 114), and pursuant to amendments by ASU 2010-20 regarding allowance for impaired loans.
(3) Represents the allowance and related loan carrying value determined in accordance with ASC 310-30, *Receivables – Loans and Debt Securities Acquired with Deteriorated Credit Quality* (formerly SOP 3-3) and pursuant to amendments by ASU 2010-20 regarding allowance for PCI loans.

Credit Quality

We monitor credit quality by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the allowance for credit losses. The following sections provide the credit quality indicators we most closely monitor. The credit quality indicators are generally based on information as of our financial statement date, with the exception of updated Fair Isaac Corporation (FICO) scores and updated loan-to-value (LTV)/combined LTV (CLTV). We obtain FICO scores at loan origination and the scores are generally updated at least quarterly, except in limited circumstances, including compliance with the Fair Credit Reporting Act (FCRA). Generally, the LTV and CLTV indicators are updated in the second month of each quarter, with updates no older than September 30, 2017. See the "Purchased Credit-Impaired Loans" section in this Note for credit quality information on our PCI portfolio.

COMMERCIAL CREDIT QUALITY INDICATORS In addition to monitoring commercial loan concentration risk, we manage a consistent process for assessing commercial loan credit quality. Generally, commercial loans are subject to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to Pass and Criticized categories. The Criticized category includes Special Mention, Substandard, and Doubtful categories which are defined by bank regulatory agencies.

Table 6.8 provides a breakdown of outstanding commercial loans by risk category. Of the $16.6 billion in criticized commercial and industrial loans and $4.6 billion in criticized commercial real estate (CRE) loans at December 31, 2017, $1.9 billion and $665 million, respectively, have been placed on nonaccrual status and written down to net realizable collateral value.

Table 6.8: Commercial Loans by Risk Category

(in millions)	Commercial and industrial	Real estate mortgage	Real estate construction	Lease financing	Total
December 31, 2017					
By risk category:					
Pass	**$ 316,431**	**122,312**	**23,981**	**18,162**	**480,886**
Criticized	**16,608**	**4,287**	**298**	**1,223**	**22,416**
Total commercial loans (excluding PCI)	**333,039**	**126,599**	**24,279**	**19,385**	**503,302**
Total commercial PCI loans (carrying value)	**86**	**—**	**—**	**—**	**86**
Total commercial loans	**$ 333,125**	**126,599**	**24,279**	**19,385**	**503,388**
December 31, 2016					
By risk category:					
Pass	$ 308,166	126,793	23,408	17,899	476,266
Criticized	22,437	5,315	451	1,390	29,593
Total commercial loans (excluding PCI)	330,603	132,108	23,859	19,289	505,859
Total commercial PCI loans (carrying value)	237	383	57	—	677
Total commercial loans	$ 330,840	132,491	23,916	19,289	506,536

Table 6.9 provides past due information for commercial loans, which we monitor as part of our credit risk management practices.

Table 6.9: Commercial Loans by Delinquency Status

(in millions)	Commercial and industrial	Real estate mortgage	Real estate construction	Lease financing	Total
December 31, 2017					
By delinquency status:					
Current-29 days past due (DPD) and still accruing	**$ 330,319**	**125,642**	**24,107**	**19,148**	**499,216**
30-89 DPD and still accruing	**795**	**306**	**135**	**161**	**1,397**
90+ DPD and still accruing	**26**	**23**	**—**	**—**	**49**
Nonaccrual loans	**1,899**	**628**	**37**	**76**	**2,640**
Total commercial loans (excluding PCI)	**333,039**	**126,599**	**24,279**	**19,385**	**503,302**
Total commercial PCI loans (carrying value)	**86**	**—**	**—**	**—**	**86**
Total commercial loans	**$ 333,125**	**126,599**	**24,279**	**19,385**	**503,388**
December 31, 2016					
By delinquency status:					
Current-29 DPD and still accruing	$ 326,765	131,165	23,776	19,042	500,748
30-89 DPD and still accruing	594	222	40	132	988
90+ DPD and still accruing	28	36	—	—	64
Nonaccrual loans	3,216	685	43	115	4,059
Total commercial loans (excluding PCI)	330,603	132,108	23,859	19,289	505,859
Total commercial PCI loans (carrying value)	237	383	57	—	677
Total commercial loans	$ 330,840	132,491	23,916	19,289	506,536

CONSUMER CREDIT QUALITY INDICATORS We have various classes of consumer loans that present unique risks. Loan delinquency, FICO credit scores and LTV for loan types are common credit quality indicators that we monitor and utilize in our evaluation of the appropriateness of the allowance for credit losses for the consumer portfolio segment.

Many of our loss estimation techniques used for the allowance for credit losses rely on delinquency-based models; therefore, delinquency is an important indicator of credit quality and the establishment of our allowance for credit losses. Table 6.10 provides the outstanding balances of our consumer portfolio by delinquency status.

Table 6.10: Consumer Loans by Delinquency Status

(in millions)	Real estate 1-4 family first mortgage	Real estate 1-4 family junior lien mortgage	Credit card	Automobile	Other revolving credit and installment	Total
December 31, 2017						
By delinquency status:						
Current-29 DPD	**$ 251,786**	**38,746**	**36,996**	**51,445**	**37,885**	**416,858**
30-59 DPD	**1,893**	**336**	**287**	**1,385**	**155**	**4,056**
60-89 DPD	**742**	**163**	**201**	**392**	**93**	**1,591**
90-119 DPD	**369**	**103**	**192**	**146**	**80**	**890**
120-179 DPD	**308**	**95**	**298**	**3**	**30**	**734**
180+ DPD	**1,091**	**243**	**2**	**—**	**25**	**1,361**
Government insured/guaranteed loans (1)	**15,143**	**—**	**—**	**—**	**—**	**15,143**
Total consumer loans (excluding PCI)	**271,332**	**39,686**	**37,976**	**53,371**	**38,268**	**440,633**
Total consumer PCI loans (carrying value)	**12,722**	**27**	**—**	**—**	**—**	**12,749**
Total consumer loans	**$ 284,054**	**39,713**	**37,976**	**53,371**	**38,268**	**453,382**
December 31, 2016						
By delinquency status:						
Current-29 DPD	$ 239,061	45,238	35,773	60,572	39,833	420,477
30-59 DPD	1,904	296	275	1,262	177	3,914
60-89 DPD	700	160	200	330	111	1,501
90-119 DPD	307	102	169	116	93	787
120-179 DPD	323	108	279	5	30	745
180+ DPD	1,661	297	4	1	22	1,985
Government insured/guaranteed loans (1)	15,605	—	—	—	—	15,605
Total consumer loans (excluding PCI)	259,561	46,201	36,700	62,286	40,266	445,014
Total consumer PCI loans (carrying value)	16,018	36	—	—	—	16,054
Total consumer loans	$ 275,579	46,237	36,700	62,286	40,266	461,068

(1) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA. Loans insured/guaranteed by the FHA/VA and 90+ DPD totaled $10.5 billion at December 31, 2017, compared with $10.1 billion at December 31, 2016.

Of the $3.0 billion of consumer loans not government insured/guaranteed that are 90 days or more past due at December 31, 2017, $1.0 billion was accruing, compared with $3.5 billion past due and $908 million accruing at December 31, 2016.

Real estate 1-4 family first mortgage loans 180 days or more past due totaled $1.1 billion, or 0.4% of total first mortgages (excluding PCI), at December 31, 2017, compared with $1.7 billion, or 0.6%, at December 31, 2016.

Table 6.11 provides a breakdown of our consumer portfolio by FICO. The December 31, 2017, FICO scores for real estate 1-4 family first and junior lien mortgages reflect a new FICO score version we adopted in first quarter 2017 to monitor and manage those portfolios. In general, the impact for us is a shift to higher scores, particularly to the 800+ level, as the new FICO score version utilizes a more refined approach that better distinguishes borrower credit risk. Most of the scored consumer portfolio has an updated FICO of 680 and above, reflecting a strong current borrower credit profile. FICO is not available for certain loan types, or may not be required if we deem it unnecessary due to strong collateral and other borrower attributes. Substantially all loans not requiring a FICO score are securities-based loans originated through retail brokerage, and totaled $8.5 billion at December 31, 2017, and $8.0 billion at December 31, 2016.

Table 6.11: Consumer Loans by FICO

(in millions)	Real estate 1-4 family first mortgage (1)	Real estate 1-4 family junior lien mortgage (1)	Credit card	Automobile	Other revolving credit and installment (1)	Total
December 31, 2017						
By FICO:						
< 600	**$ 5,145**	**1,768**	**3,525**	**8,858**	**863**	**20,159**
600-639	**3,487**	**1,253**	**3,101**	**5,615**	**904**	**14,360**
640-679	**6,789**	**2,387**	**5,690**	**7,696**	**1,959**	**24,521**
680-719	**14,977**	**4,797**	**7,628**	**8,825**	**3,582**	**39,809**
720-759	**27,926**	**6,246**	**8,097**	**7,806**	**5,089**	**55,164**
760-799	**55,590**	**7,323**	**6,372**	**6,468**	**6,257**	**82,010**
800+	**136,729**	**15,144**	**2,994**	**7,845**	**8,455**	**171,167**
No FICO available	**5,546**	**768**	**569**	**258**	**2,648**	**9,789**
FICO not required	**—**	**—**	**—**	**—**	**8,511**	**8,511**
Government insured/guaranteed loans (2)	**15,143**	**—**	**—**	**—**	**—**	**15,143**
Total consumer loans (excluding PCI)	**271,332**	**39,686**	**37,976**	**53,371**	**38,268**	**440,633**
Total consumer PCI loans (carrying value)	**12,722**	**27**	**—**	**—**	**—**	**12,749**
Total consumer loans	**$ 284,054**	**39,713**	**37,976**	**53,371**	**38,268**	**453,382**
December 31, 2016						
By FICO:						
< 600	$ 6,720	2,591	3,475	9,934	976	23,696
600-639	5,400	1,917	3,109	6,705	1,056	18,187
640-679	10,975	3,747	5,678	10,204	2,333	32,937
680-719	23,300	6,432	7,382	11,233	4,302	52,649
720-759	38,832	9,413	7,632	8,769	5,869	70,515
760-799	103,608	14,929	6,191	8,164	8,348	141,240
800+	49,508	6,391	2,868	6,856	6,434	72,057
No FICO available	5,613	781	365	421	2,906	10,086
FICO not required	—	—	—	—	8,042	8,042
Government insured/guaranteed loans (2)	15,605	—	—	—	—	15,605
Total consumer loans (excluding PCI)	259,561	46,201	36,700	62,286	40,266	445,014
Total consumer PCI loans (carrying value)	16,018	36	—	—	—	16,054
Total consumer loans	$ 275,579	46,237	36,700	62,286	40,266	461,068

(1) The December 31, 2017, amounts reflect updated FICO score version implemented in first quarter 2017.
(2) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

LTV refers to the ratio comparing the loan's unpaid principal balance to the property's collateral value. CLTV refers to the combination of first mortgage and junior lien mortgage (including unused line amounts for credit line products) ratios. LTVs and CLTVs are updated quarterly using a cascade approach which first uses values provided by automated valuation models (AVMs) for the property. If an AVM is not available, then the value is estimated using the original appraised value adjusted by the change in Home Price Index (HPI) for the property location. If an HPI is not available, the original appraised value is used. The HPI value is normally the only method considered for high value properties, generally with an original value of $1 million or more, as the AVM values have proven less accurate for these properties.

Table 6.12 shows the most updated LTV and CLTV distribution of the real estate 1-4 family first and junior lien mortgage loan portfolios. We consider the trends in residential real estate markets as we monitor credit risk and establish our allowance for credit losses. In the event of a default, any loss should be limited to the portion of the loan amount in excess of the net realizable value of the underlying real estate collateral value. Certain loans do not have an LTV or CLTV due to industry data availability and portfolios acquired from or serviced by other institutions.

Table 6.12: Consumer Loans by LTV/CLTV

	December 31, 2017			December 31, 2016		
(in millions)	Real estate 1-4 family first mortgage by LTV	Real estate 1-4 family junior lien mortgage by CLTV	Total	Real estate 1-4 family first mortgage by LTV	Real estate 1-4 family junior lien mortgage by CLTV	Total
By LTV/CLTV:						
0-60%	$ 133,902	16,301	150,203	121,430	16,464	137,894
60.01-80%	104,639	12,918	117,557	101,726	15,262	116,988
80.01-100%	13,924	6,580	20,504	15,795	8,765	24,560
100.01-120% (1)	1,868	2,427	4,295	2,644	3,589	6,233
> 120% (1)	783	1,008	1,791	1,066	1,613	2,679
No LTV/CLTV available	1,073	452	1,525	1,295	508	1,803
Government insured/guaranteed loans (2)	15,143	—	15,143	15,605	—	15,605
Total consumer loans (excluding PCI)	271,332	39,686	311,018	259,561	46,201	305,762
Total consumer PCI loans (carrying value)	12,722	27	12,749	16,018	36	16,054
Total consumer loans	$ 284,054	39,713	323,767	275,579	46,237	321,816

(1) Reflects total loan balances with LTV/CLTV amounts in excess of 100%. In the event of default, the loss content would generally be limited to only the amount in excess of 100% LTV/CLTV.
(2) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

NONACCRUAL LOANS Table 6.13 provides loans on nonaccrual status. PCI loans are excluded from this table because they continue to earn interest from accretable yield, independent of performance in accordance with their contractual terms.

Table 6.13: Nonaccrual Loans

(in millions)	Dec 31, 2017	Dec 31, 2016
Commercial:		
Commercial and industrial	$ 1,899	3,216
Real estate mortgage	628	685
Real estate construction	37	43
Lease financing	76	115
Total commercial	2,640	4,059
Consumer:		
Real estate 1-4 family first mortgage (1)	4,122	4,962
Real estate 1-4 family junior lien mortgage	1,086	1,206
Automobile	130	106
Other revolving credit and installment	58	51
Total consumer	5,396	6,325
Total nonaccrual loans (excluding PCI)	$ 8,036	10,384

(1) Includes MHFS of $136 million and $149 million at December 31, 2017 and 2016, respectively.

LOANS IN PROCESS OF FORECLOSURE Our recorded investment in consumer mortgage loans collateralized by residential real estate property that are in process of foreclosure was $6.3 billion and $8.1 billion at December 31, 2017 and 2016, respectively, which included $4.0 billion and $4.8 billion, respectively, of loans that are government insured/guaranteed. We commence the foreclosure process on consumer real estate loans when a borrower becomes 120 days delinquent in accordance with Consumer Finance Protection Bureau Guidelines. Foreclosure procedures and timelines vary depending on whether the property address resides in a judicial or non-judicial state. Judicial states require the foreclosure to be processed through the state's courts while non-judicial states are processed without court intervention. Foreclosure timelines vary according to state law.

LOANS 90 DAYS OR MORE PAST DUE AND STILL ACCRUING Certain loans 90 days or more past due as to interest or principal are still accruing, because they are (1) well-secured and in the process of collection or (2) real estate 1-4 family mortgage loans or consumer loans exempt under regulatory rules from being classified as nonaccrual until later delinquency, usually 120 days past due. PCI loans of $1.4 billion at December 31, 2017, and $2.0 billion at December 31, 2016, are not included in these past due and still accruing loans even though they are 90 days or more contractually past due. These PCI loans are considered to be accruing because they continue to earn interest from accretable yield, independent of performance in accordance with their contractual terms.

Table 6.14 shows non-PCI loans 90 days or more past due and still accruing by class for loans not government insured/ guaranteed.

Table 6.14: Loans 90 Days or More Past Due and Still Accruing

(in millions)		Dec 31, 2017	Dec 31, 2016
Total (excluding PCI):	$	**11,997**	11,858
Less: FHA insured/guaranteed by the VA (1)(2)		**10,934**	10,883
Less: Student loans guaranteed under the Federal Family Education Loan Program (FFELP) (3)		**—**	3
Total, not government insured/guaranteed	$	**1,063**	972
By segment and class, not government insured/guaranteed:			
Commercial:			
Commercial and industrial	$	**26**	28
Real estate mortgage		**23**	36
Total commercial		**49**	64
Consumer:			
Real estate 1-4 family first mortgage (2)		**219**	175
Real estate 1-4 family junior lien mortgage (2)		**60**	56
Credit card		**492**	452
Automobile		**143**	112
Other revolving credit and installment		**100**	113
Total consumer		**1,014**	908
Total, not government insured/guaranteed	$	**1,063**	972

(1) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.
(2) Includes mortgage loans held for sale 90 days or more past due and still accruing.
(3) Represents loans whose repayments are largely guaranteed by agencies on behalf of the U.S. Department of Education under the FFELP. All remaining student loans guaranteed under the FFELP were sold as of March 31, 2017.

IMPAIRED LOANS Table 6.15 summarizes key information for impaired loans. Our impaired loans predominantly include loans on nonaccrual status in the commercial portfolio segment and loans modified in a TDR, whether on accrual or nonaccrual status. These impaired loans generally have estimated losses which are included in the allowance for credit losses. We have impaired loans with no allowance for credit losses when loss content has been previously recognized through charge-offs and we do not anticipate additional charge-offs or losses, or certain loans are currently performing in accordance with their terms and for which no loss has been estimated. Impaired loans exclude PCI loans. Table 6.15 includes trial modifications that totaled $194 million at December 31, 2017, and $299 million at December 31, 2016.

For additional information on our impaired loans and allowance for credit losses, see Note 1 (Summary of Significant Accounting Policies).

Table 6.15: Impaired Loans Summary

		Recorded investment		
(in millions)	Unpaid principal balance (1)	Impaired loans	Impaired loans with related allowance for credit losses	Related allowance for credit losses
December 31, 2017				
Commercial:				
Commercial and industrial	**$ 3,577**	**2,568**	**2,310**	**462**
Real estate mortgage	**1,502**	**1,239**	**1,207**	**211**
Real estate construction	**95**	**54**	**45**	**9**
Lease financing	**132**	**99**	**89**	**23**
Total commercial	**5,306**	**3,960**	**3,651**	**705**
Consumer:				
Real estate 1-4 family first mortgage	**14,020**	**12,225**	**6,060**	**770**
Real estate 1-4 family junior lien mortgage	**2,135**	**1,918**	**1,421**	**245**
Credit card	**356**	**356**	**356**	**136**
Automobile	**157**	**87**	**34**	**5**
Other revolving credit and installment	**136**	**128**	**117**	**29**
Total consumer (2)	**16,804**	**14,714**	**7,988**	**1,185**
Total impaired loans (excluding PCI)	**$ 22,110**	**18,674**	**11,639**	**1,890**
December 31, 2016				
Commercial:				
Commercial and industrial	$ 5,058	3,742	3,418	675
Real estate mortgage	1,777	1,418	1,396	280
Real estate construction	167	93	93	22
Lease financing	146	119	119	23
Total commercial	7,148	5,372	5,026	1,000
Consumer:				
Real estate 1-4 family first mortgage	16,438	14,362	9,475	1,117
Real estate 1-4 family junior lien mortgage	2,399	2,156	1,681	350
Credit card	300	300	300	104
Automobile	153	85	31	5
Other revolving credit and installment	109	102	91	17
Total consumer (2)	19,399	17,005	11,578	1,593
Total impaired loans (excluding PCI)	$ 26,547	22,377	16,604	2,593

(1) Excludes the unpaid principal balance for loans that have been fully charged off or otherwise have zero recorded investment.
(2) Includes the recorded investment of $1.4 billion and $1.5 billion at December 31, 2017 and 2016, respectively, of government insured/guaranteed loans that are predominantly insured by the FHA or guaranteed by the VA and generally do not have an allowance. Impaired loans may also have limited, if any, allowance when the recorded investment of the loan approximates estimated net realizable value as a result of charge-offs prior to a TDR modification.

Commitments to lend additional funds on loans whose terms have been modified in a TDR amounted to $579 million and $403 million at December 31, 2017 and 2016, respectively.

Table 6.16 provides the average recorded investment in impaired loans and the amount of interest income recognized on impaired loans by portfolio segment and class.

Table 6.16: Average Recorded Investment in Impaired Loans

	Year ended December 31,					
	2017		2016		2015	
(in millions)	**Average recorded investment**	**Recognized interest income**	Average recorded investment	Recognized interest income	Average recorded investment	Recognized interest income
Commercial:						
Commercial and industrial	**$ 3,241**	**118**	3,408	101	1,240	80
Real estate mortgage	**1,328**	**91**	1,636	128	2,128	140
Real estate construction	**66**	**14**	115	11	246	25
Lease financing	**105**	**1**	88	—	26	—
Total commercial	**4,740**	**224**	5,247	240	3,640	245
Consumer:						
Real estate 1-4 family first mortgage	**13,326**	**730**	15,857	828	17,924	921
Real estate 1-4 family junior lien mortgage	**2,041**	**121**	2,294	132	2,480	137
Credit card	**323**	**36**	295	34	317	39
Automobile	**86**	**11**	93	11	115	13
Other revolving credit and installment	**117**	**8**	89	6	61	5
Total consumer	**15,893**	**906**	18,628	1,011	20,897	1,115
Total impaired loans (excluding PCI)	**$ 20,633**	**1,130**	23,875	1,251	24,537	1,360
Interest income:						
Cash basis of accounting		**$ 299**		353		412
Other (1)		**831**		898		948
Total interest income		**$ 1,130**		1,251		1,360

(1) Includes interest recognized on accruing TDRs, interest recognized related to certain impaired loans which have an allowance calculated using discounting, and amortization of purchase accounting adjustments related to certain impaired loans.

TROUBLED DEBT RESTRUCTURINGS (TDRs) When, for economic or legal reasons related to a borrower's financial difficulties, we grant a concession for other than an insignificant period of time to a borrower that we would not otherwise consider, the related loan is classified as a TDR, the balance of which totaled $17.8 billion and $20.8 billion at December 31, 2017 and 2016, respectively. We do not consider loan resolutions such as foreclosure or short sale to be a TDR.

We may require some consumer borrowers experiencing financial difficulty to make trial payments generally for a period of three to four months, according to the terms of a planned permanent modification, to determine if they can perform according to those terms. These arrangements represent trial modifications, which we classify and account for as TDRs. While loans are in trial payment programs, their original terms are not considered modified and they continue to advance through delinquency status and accrue interest according to their original terms.

Table 6.17 summarizes our TDR modifications for the periods presented by primary modification type and includes the financial effects of these modifications. For those loans that modify more than once, the table reflects each modification that occurred during the period. Loans that both modify and pay off within the period, as well as changes in recorded investment during the period for loans modified in prior periods, are not included in the table.

Table 6.17: TDR Modifications

		Primary modification type (1)				Financial effects of modifications		
(in millions)		Principal (2)	Interest rate reduction	Other concessions (3)	Total	Charge- offs (4)	Weighted average interest rate reduction	Recorded investment related to interest rate reduction (5)
Year ended December 31, 2017								
Commercial:								
Commercial and industrial	**$**	**24**	**45**	**2,912**	**2,981**	**173**	**0.64%**	**$ 45**
Real estate mortgage		**5**	**59**	**507**	**571**	**20**	**1.28**	**59**
Real estate construction		**—**	**1**	**26**	**27**	**—**	**0.69**	**1**
Lease financing		**—**	**—**	**37**	**37**	**—**	**—**	**—**
Total commercial		**29**	**105**	**3,482**	**3,616**	**193**	**1.00**	**105**
Consumer:								
Real estate 1-4 family first mortgage		**231**	**140**	**1,035**	**1,406**	**15**	**2.57**	**257**
Real estate 1-4 family junior lien mortgage		**25**	**82**	**81**	**188**	**14**	**3.26**	**93**
Credit card		**—**	**257**	**—**	**257**	**—**	**11.98**	**257**
Automobile		**2**	**15**	**67**	**84**	**39**	**5.89**	**15**
Other revolving credit and installment		**—**	**47**	**8**	**55**	**1**	**7.47**	**47**
Trial modifications (6)		**—**	**—**	**(28)**	**(28)**	**—**	**—**	**—**
Total consumer		**258**	**541**	**1,163**	**1,962**	**69**	**6.70**	**669**
Total	**$**	**287**	**646**	**4,645**	**5,578**	**262**	**5.92%**	**$ 774**
Year ended December 31, 2016								
Commercial:								
Commercial and industrial	$	42	130	3,154	3,326	360	1.91 %	$ 130
Real estate mortgage		2	105	560	667	1	1.15	105
Real estate construction		—	27	72	99	—	1.02	27
Lease financing		—	—	8	8	—	—	—
Total commercial		44	262	3,794	4,100	361	1.51	262
Consumer:								
Real estate 1-4 family first mortgage		338	288	1,411	2,037	49	2.69	507
Real estate 1-4 family junior lien mortgage		23	109	106	238	37	3.07	130
Credit card		—	180	—	180	—	12.09	180
Automobile		2	16	57	75	36	6.07	16
Other revolving credit and installment		1	33	10	44	2	6.83	33
Trial modifications (6)		—	—	44	44	—	—	—
Total consumer		364	626	1,628	2,618	124	4.92	866
Total	$	408	888	5,422	6,718	485	4.13 %	$ 1,128
Year ended December 31, 2015								
Commercial:								
Commercial and industrial	$	10	33	1,806	1,849	62	1.11 %	$ 33
Real estate mortgage		14	133	904	1,051	1	1.47	133
Real estate construction		11	15	72	98	—	0.95	15
Lease financing		—	—	—	—	—	—	—
Total commercial		35	181	2,782	2,998	63	1.36	181
Consumer:								
Real estate 1-4 family first mortgage		400	339	1,892	2,631	53	2.50	656
Real estate 1-4 family junior lien mortgage		34	99	172	305	43	3.09	127
Credit card		—	166	—	166	—	11.44	166
Automobile		1	5	87	93	38	8.28	5
Other revolving credit and installment		—	27	8	35	1	5.94	27
Trial modifications (6)		—	—	44	44	—	—	—
Total consumer		435	636	2,203	3,274	135	4.21	981
Total	$	470	817	4,985	6,272	198	3.77 %	$ 1,162

(1) Amounts represent the recorded investment in loans after recognizing the effects of the TDR, if any. TDRs may have multiple types of concessions, but are presented only once in the first modification type based on the order presented in the table above. The reported amounts include loans remodified of $2.1 billion, $1.6 billion and $2.1 billion, for the years ended December 31, 2017, 2016, and 2015, respectively.
(2) Principal modifications include principal forgiveness at the time of the modification, contingent principal forgiveness granted over the life of the loan based on borrower performance, and principal that has been legally separated and deferred to the end of the loan, with a zero percent contractual interest rate.
(3) Other concessions include loans discharged in bankruptcy, loan renewals, term extensions and other interest and noninterest adjustments, but exclude modifications that also forgive principal and/or reduce the contractual interest rate.
(4) Charge-offs include write-downs of the investment in the loan in the period it is contractually modified. The amount of charge-off will differ from the modification terms if the loan has been charged down prior to the modification based on our policies. In addition, there may be cases where we have a charge-off/down with no legal principal modification. Modifications resulted in legally forgiving principal (actual, contingent or deferred) of $32 million, $67 million and $100 million for the years ended December 31, 2017, 2016, and 2015, respectively.
(5) Reflects the effect of reduced interest rates on loans with an interest rate concession as one of their concession types, which includes loans reported as a principal primary modification type that also have an interest rate concession.
(6) Trial modifications are granted a delay in payments due under the original terms during the trial payment period. However, these loans continue to advance through delinquency status and accrue interest according to their original terms. Any subsequent permanent modification generally includes interest rate related concessions; however, the exact concession type and resulting financial effect are usually not known until the loan is permanently modified. Trial modifications for the period are presented net of previously reported trial modifications that became permanent in the current period.

Table 6.18 summarizes permanent modification TDRs that have defaulted in the current period within 12 months of their permanent modification date. We are reporting these defaulted TDRs based on a payment default definition of 90 days past due for the commercial portfolio segment and 60 days past due for the consumer portfolio segment.

Table 6.18: Defaulted TDRs

	Recorded investment of defaults		
	Year ended December 31,		
(in millions)	**2017**	2016	2015
Commercial:			
Commercial and industrial	$ **173**	124	66
Real estate mortgage	**61**	66	104
Real estate construction	**4**	3	4
Lease financing	**1**	—	—
Total commercial	**239**	193	174
Consumer:			
Real estate 1-4 family first mortgage	**114**	138	187
Real estate 1-4 family junior lien mortgage	**19**	20	17
Credit card	**74**	56	52
Automobile	**15**	13	13
Other revolving credit and installment	**5**	4	3
Total consumer	**227**	231	272
Total	$ **466**	424	446

Purchased Credit-Impaired Loans

Substantially all of our PCI loans were acquired from Wachovia on December 31, 2008, at which time we acquired commercial and consumer loans with a carrying value of $18.7 billion and $40.1 billion, respectively. The unpaid principal balance on December 31, 2008 was $98.2 billion for the total of commercial and consumer PCI loans. Table 6.19 presents PCI loans net of any remaining purchase accounting adjustments. Real estate 1-4 family first mortgage PCI loans are predominantly Pick-a-Pay loans.

Table 6.19: PCI Loans

(in millions)	**Dec 31, 2017**	Dec 31, 2016
Commercial:		
Commercial and industrial	$ **86**	237
Real estate mortgage	**—**	383
Real estate construction	**—**	57
Total commercial	**86**	677
Consumer:		
Real estate 1-4 family first mortgage	**12,722**	16,018
Real estate 1-4 family junior lien mortgage	**27**	36
Total consumer	**12,749**	16,054
Total PCI loans (carrying value)	$ **12,835**	16,731
Total PCI loans (unpaid principal balance)	$ **18,975**	24,136

ACCRETABLE YIELD The excess of cash flows expected to be collected over the carrying value of PCI loans is referred to as the accretable yield and is recognized in interest income using an effective yield method over the remaining life of the loan, or pools of loans. The accretable yield is affected by:

- changes in interest rate indices for variable rate PCI loans – expected future cash flows are based on the variable rates in effect at the time of the regular evaluations of cash flows expected to be collected;
- changes in prepayment assumptions – prepayments affect the estimated life of PCI loans which may change the amount of interest income, and possibly principal, expected to be collected; and
- changes in the expected principal and interest payments over the estimated life – updates to expected cash flows are driven by the credit outlook and actions taken with borrowers. Changes in expected future cash flows from loan modifications are included in the regular evaluations of cash flows expected to be collected.

The change in the accretable yield related to PCI loans since the merger with Wachovia is presented in Table 6.20. Changes during 2017 reflected an expectation, as a result of our quarterly evaluation of PCI cash flows, that prepayment of modified Pick-a-Pay loans will continue to increase over their estimated weighted-average life and that expected loss has decreased as a result of continued reductions in loan to value ratios and sustained higher housing prices. Changes during 2017 also reflect a $309 million gain on the sale of $569 million Pick-a-Pay PCI loans in second quarter 2017.

Table 6.20: Change in Accretable Yield

(in millions)		**2017**	2016	2015	2009-2014
Total, beginning of period	**$**	**11,216**	16,301	17,790	10,447
Addition of accretable yield due to acquisitions		**2**	27	—	132
Accretion into interest income (1)		**(1,406)**	(1,365)	(1,429)	(12,783)
Accretion into noninterest income due to sales (2)		**(334)**	(9)	(28)	(430)
Reclassification from nonaccretable difference for loans with improving credit-related cash flows		**642**	1,221	1,166	8,568
Changes in expected cash flows that do not affect nonaccretable difference (3)		**(1,233)**	(4,959)	(1,198)	11,856
Total, end of period	**$**	**8,887**	11,216	16,301	17,790

(1) Includes accretable yield released as a result of settlements with borrowers, which is included in interest income.
(2) Includes accretable yield released as a result of sales to third parties, which is included in noninterest income.
(3) Represents changes in cash flows expected to be collected due to the impact of modifications, changes in prepayment assumptions, changes in interest rates on variable rate PCI loans and sales to third parties.

COMMERCIAL PCI CREDIT QUALITY INDICATORS
Table 6.21 provides a breakdown of commercial PCI loans by risk category.

Table 6.21: Commercial PCI Loans by Risk Category

(in millions)		Commercial and industrial	Real estate mortgage	Real estate construction	Total
December 31, 2017					
By risk category:					
Pass	**$**	**8**	**—**	**—**	**8**
Criticized		**78**	**—**	**—**	**78**
Total commercial PCI loans	**$**	**86**	**—**	**—**	**86**
December 31, 2016					
By risk category:					
Pass	$	92	263	47	402
Criticized		145	120	10	275
Total commercial PCI loans	$	237	383	57	677

Table 6.22 provides past due information for commercial PCI loans.

Table 6.22: Commercial PCI Loans by Delinquency Status

(in millions)	Commercial and industrial	Real estate mortgage	Real estate construction	Total
December 31, 2017				
By delinquency status:				
Current-29 DPD and still accruing	**$ 86**	**—**	**—**	**86**
30-89 DPD and still accruing	**—**	**—**	**—**	**—**
90+ DPD and still accruing	**—**	**—**	**—**	**—**
Total commercial PCI loans	**$ 86**	**—**	**—**	**86**
December 31, 2016				
By delinquency status:				
Current-29 DPD and still accruing	$ 235	353	48	636
30-89 DPD and still accruing	2	10	—	12
90+ DPD and still accruing	—	20	9	29
Total commercial PCI loans	$ 237	383	57	677

CONSUMER PCI CREDIT QUALITY INDICATORS Our consumer PCI loans were aggregated into several pools of loans at acquisition. Below, we have provided credit quality indicators based on the unpaid principal balance (adjusted for write-downs) of the individual loans included in the pool, but we have not allocated the remaining purchase accounting adjustments, which were established at a pool level. Table 6.23 provides the delinquency status of consumer PCI loans.

Table 6.23: Consumer PCI Loans by Delinquency Status

	December 31, 2017			December 31, 2016		
(in millions)	**Real estate 1-4 family first mortgage**	**Real estate 1-4 family junior lien mortgage**	**Total**	Real estate 1-4 family first mortgage	Real estate 1-4 family junior lien mortgage	Total
By delinquency status:						
Current-29 DPD and still accruing	**$ 13,127**	**138**	**13,265**	16,095	171	16,266
30-59 DPD and still accruing	**1,317**	**8**	**1,325**	1,488	7	1,495
60-89 DPD and still accruing	**622**	**3**	**625**	668	2	670
90-119 DPD and still accruing	**293**	**2**	**295**	233	2	235
120-179 DPD and still accruing	**219**	**2**	**221**	238	2	240
180+ DPD and still accruing	**1,310**	**4**	**1,314**	2,081	8	2,089
Total consumer PCI loans (adjusted unpaid principal balance)	**$ 16,888**	**157**	**17,045**	20,803	192	20,995
Total consumer PCI loans (carrying value)	**$ 12,722**	**27**	**12,749**	16,018	36	16,054

Table 6.24 provides FICO scores for consumer PCI loans.

Table 6.24: Consumer PCI Loans by FICO

(in millions)	December 31, 2017 (1) Real estate 1-4 family first mortgage	Real estate 1-4 family junior lien mortgage	Total	December 31, 2016 Real estate 1-4 family first mortgage	Real estate 1-4 family junior lien mortgage	Total
By FICO:						
< 600	$ 4,014	37	4,051	4,292	46	4,338
600-639	2,086	20	2,106	3,001	26	3,027
640-679	2,393	24	2,417	3,972	35	4,007
680-719	2,242	29	2,271	3,170	37	3,207
720-759	1,779	23	1,802	1,767	24	1,791
760-799	933	12	945	962	15	977
800+	468	6	474	254	4	258
No FICO available	2,973	6	2,979	3,385	5	3,390
Total consumer PCI loans (adjusted unpaid principal balance)	$ 16,888	157	17,045	20,803	192	20,995
Total consumer PCI loans (carrying value)	$ 12,722	27	12,749	16,018	36	16,054

(1) December 31, 2017 amounts reflect updated FICO score version implemented in first quarter 2017.

Table 6.25 shows the distribution of consumer PCI loans by LTV for real estate 1-4 family first mortgages and by CLTV for real estate 1-4 family junior lien mortgages.

Table 6.25: Consumer PCI Loans by LTV/CLTV

(in millions)	December 31, 2017 Real estate 1-4 family first mortgage by LTV	Real estate 1-4 family junior lien mortgage by CLTV	Total	December 31, 2016 Real estate 1-4 family first mortgage by LTV	Real estate 1-4 family junior lien mortgage by CLTV	Total
By LTV/CLTV:						
0-60%	$ 8,010	45	8,055	7,513	38	7,551
60.01-80%	6,510	63	6,573	9,000	76	9,076
80.01-100%	1,975	35	2,010	3,458	54	3,512
100.01-120% (1)	319	10	329	669	18	687
> 120% (1)	73	3	76	161	5	166
No LTV/CLTV available	1	1	2	2	1	3
Total consumer PCI loans (adjusted unpaid principal balance)	$ 16,888	157	17,045	20,803	192	20,995
Total consumer PCI loans (carrying value)	$ 12,722	27	12,749	16,018	36	16,054

(1) Reflects total loan balances with LTV/CLTV amounts in excess of 100%. In the event of default, the loss content would generally be limited to only the amount in excess of 100% LTV/CLTV.

Note 7: Premises, Equipment, Lease Commitments and Other Assets

Table 7.1: Premises and Equipment

(in millions)		Dec 31, 2017	Dec 31, 2016
Land	$	1,799	1,726
Buildings		8,865	8,584
Furniture and equipment		7,089	6,606
Leasehold improvements		2,291	2,199
Premises and equipment leased under capital leases		103	70
Total premises and equipment		20,147	19,185
Less: Accumulated depreciation and amortization		11,300	10,852
Net book value, premises and equipment	$	8,847	8,333

Depreciation and amortization expense for premises and equipment was $1.2 billion for the years 2017, 2016 and 2015.

Dispositions of premises and equipment resulted in net gains of $128 million, $44 million and $75 million in 2017, 2016 and 2015, respectively, included in other noninterest expense.

We have obligations under a number of noncancelable operating leases for premises and equipment. The leases predominantly expire over the next fifteen years, with the longest expiring in 2105, and many provide for periodic adjustment of rentals based on changes in various economic indicators. Some leases also include a renewal option. Table 7.2 provides the future minimum payments of noncancelable operating leases, net of sublease income, with terms greater than one year as of December 31, 2017.

Table 7.2: Minimum Lease Payments of Operating Leases

(in millions)		
Year ended December 31,		
2018	$	1,172
2019		1,095
2020		961
2021		776
2022		605
Thereafter		1,976
Total	$	6,585

Total minimum lease payments for operating leases above are net of $469 million of noncancelable sublease income. Operating lease rental expense (predominantly for premises) was $1.3 billion for the years 2017, 2016 and 2015, net of sublease income of $76 million, $86 million and $103 million for the same years, respectively.

Table 7.3 presents the components of other assets.

Table 7.3: Other Assets

(in millions)		Dec 31, 2017	Dec 31, 2016
Nonmarketable equity investments:			
Cost method:			
Federal bank stock	$	5,369	6,407
Private equity		1,394	1,465
Auction rate securities		400	525
Total cost method		7,163	8,397
Equity method:			
LIHTC (1)		10,269	9,714
Private equity		3,839	3,635
Tax-advantaged renewable energy		1,950	2,054
New market tax credit and other		294	305
Total equity method		16,352	15,708
Fair value (2)		4,867	3,275
Total nonmarketable equity investments		28,382	27,380
Corporate/bank-owned life insurance		19,549	19,325
Accounts receivable (3)		39,127	31,056
Interest receivable		5,688	5,339
Core deposit intangibles		769	1,620
Customer relationship and other amortized intangibles		841	1,089
Foreclosed assets:			
Residential real estate:			
Government insured/guaranteed (3)		120	197
Non-government insured/guaranteed		252	378
Non-residential real estate		270	403
Operating lease assets		9,666	10,089
Due from customers on acceptances		177	196
Other		13,540	17,469
Total other assets	$	118,381	114,541

(1) Represents low income housing tax credit investments.
(2) Represents nonmarketable equity investments for which we have elected the fair value option. See Note 17 (Fair Values of Assets and Liabilities) for additional information.
(3) Certain government-guaranteed residential real estate mortgage loans upon foreclosure are included in Accounts receivable. Both principal and interest related to these foreclosed real estate assets are collectible because the loans were predominantly insured by the FHA or guaranteed by the VA. For more information on the classification of certain government-guaranteed mortgage loans upon foreclosure, see Note 1 (Summary of Significant Accounting Policies).

Table 7.4 presents income (expense) related to nonmarketable equity investments.

Table 7.4: Nonmarketable Equity Investments

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Net realized gains from nonmarketable equity investments	**$ 812**	579	1,659
All other	**(1,042)**	(508)	(743)
Total	**$ (230)**	71	916

Low Income Housing Tax Credit Investments We invest in affordable housing projects that qualify for the low income housing tax credit (LIHTC), which is designed to promote private development of low income housing. These investments generate a return primarily through realization of federal tax credits.

Total LIHTC investments were $10.3 billion and $9.7 billion at December 31, 2017 and 2016, respectively. In 2017, we recognized pre-tax losses of $1.2 billion related to our LIHTC investments, compared with $816 million in 2016. We also recognized total tax benefits of $1.5 billion in 2017, which included tax credits recorded in income taxes of $1.1 billion. In 2016, total tax benefits were $1.2 billion, which included tax credits of $939 million. We are periodically required to provide additional financial support during the investment period. Our liability for these unfunded commitments was $3.6 billion at December 31, 2017 and 2016. Predominantly all of this liability is expected to be paid over the next three years. This liability is included in long-term debt.

Note 8: Securitizations and Variable Interest Entities

Involvement with SPEs

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with SPEs, which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. Generally, SPEs are formed in connection with securitization transactions. In a securitization transaction, assets are transferred to an SPE, which then issues to investors various forms of interests in those assets and may also enter into derivative transactions. In a securitization transaction where we transferred assets from our balance sheet, we typically receive cash and/or other interests in an SPE as proceeds for the assets we transfer. Also, in certain transactions, we may retain the right to service the transferred receivables and to repurchase those receivables from the SPE if the outstanding balance of the receivables falls to a level where the cost exceeds the benefits of servicing such receivables. In addition, we may purchase the right to service loans in an SPE that were transferred to the SPE by a third party.

In connection with our securitization activities, we have various forms of ongoing involvement with SPEs, which may include:

- underwriting securities issued by SPEs and subsequently making markets in those securities;
- providing liquidity facilities to support short-term obligations of SPEs issued to third party investors;
- providing credit enhancement on securities issued by SPEs or market value guarantees of assets held by SPEs through the use of letters of credit, financial guarantees, credit default swaps and total return swaps;
- entering into other derivative contracts with SPEs;
- holding senior or subordinated interests in SPEs;
- acting as servicer or investment manager for SPEs; and
- providing administrative or trustee services to SPEs.

SPEs formed in connection with securitization transactions are generally considered variable interest entities (VIEs). SPEs formed for other corporate purposes may be VIEs as well. A VIE is an entity that has either a total equity investment that is insufficient to finance its activities without additional subordinated financial support or whose equity investors lack the ability to control the entity's activities or lack the ability to receive expected benefits or absorb obligations in a manner that's consistent with their investment in the entity. A VIE is consolidated by its primary beneficiary, the party that has both the power to direct the activities that most significantly impact the VIE and a variable interest that could potentially be significant to the VIE. A variable interest is a contractual, ownership or other interest whose value changes with changes in the fair value of the VIE's net assets. To determine whether or not a variable interest we hold could potentially be significant to the VIE, we consider both qualitative and quantitative factors regarding the nature, size and form of our involvement with the VIE. We assess whether or not we are the primary beneficiary of a VIE on an on-going basis.

We have segregated our involvement with VIEs between those VIEs which we consolidate, those which we do not consolidate and those for which we account for the transfers of financial assets as secured borrowings. Secured borrowings are transactions involving transfers of our financial assets to third parties that are accounted for as financings with the assets pledged as collateral. Accordingly, the transferred assets remain recognized on our balance sheet. Subsequent tables within this Note further segregate these transactions by structure type.

Table 8.1 provides the classifications of assets and liabilities in our balance sheet for our transactions with VIEs.

Table 8.1: Balance Sheet Transactions with VIEs

(in millions)	VIEs that we do not consolidate	VIEs that we consolidate		Transfers that we account for as secured borrowings	Total
December 31, 2017					
Cash	**$ —**	**116**		**—**	**116**
Federal funds sold, securities purchased under resale agreements and other short-term investments	**—**	**376**		**—**	**376**
Trading assets	**1,305**	**294**		**201**	**1,800**
Investment securities (1)	**3,773**	**—**		**358**	**4,131**
Loans	**4,274**	**12,482**		**110**	**16,866**
Mortgage servicing rights	**13,628**	**—**		**—**	**13,628**
Derivative assets	**44**	**—**		**—**	**44**
Other assets	**10,740**	**349**		**6**	**11,095**
Total assets	**33,764**	**13,617**		**675**	**48,056**
Short-term borrowings	**—**	**—**		**522**	**522**
Derivative liabilities	**106**	**5**	(2)	**—**	**111**
Accrued expenses and other liabilities	**244**	**132**	(2)	**10**	**386**
Long-term debt	**3,590**	**1,479**	(2)	**111**	**5,180**
Total liabilities	**3,940**	**1,616**		**643**	**6,199**
Noncontrolling interests	**—**	**283**		**—**	**283**
Net assets	**$ 29,824**	**11,718**		**32**	**41,574**
December 31, 2016					
Cash	$ —	168		—	168
Federal funds sold, securities purchased under resale agreements and other short-term investments	—	74		—	74
Trading assets	2,034	130		201	2,365
Investment securities (1)	8,530	—		786	9,316
Loans	6,698	12,589		138	19,425
Mortgage servicing rights	13,386	—		—	13,386
Derivative assets	91	1		—	92
Other assets	10,281	452		11	10,744
Total assets	41,020	13,414		1,136	55,570
Short-term borrowings	—	—		905	905
Derivative liabilities	59	33	(2)	—	92
Accrued expenses and other liabilities	306	107	(2)	2	415
Long-term debt	3,598	3,694	(2)	136	7,428
Total liabilities	3,963	3,834		1,043	8,840
Noncontrolling interests	—	138		—	138
Net assets	$ 37,057	9,442		93	46,592

(1) Excludes certain debt securities related to loans serviced for the Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC) and GNMA.
(2) There were no VIE liabilities with recourse to the general credit of Wells Fargo for the periods presented.

Transactions with Unconsolidated VIEs

Our transactions with unconsolidated VIEs include securitizations of residential mortgage loans, CRE loans, student loans, automobile loans and leases, certain dealer floorplan loans; investment and financing activities involving collateralized debt obligations (CDOs) backed by asset-backed and CRE securities, tax credit structures, collateralized loan obligations (CLOs) backed by corporate loans, and other types of structured financing. We have various forms of involvement with VIEs, including servicing, holding senior or subordinated interests, entering into liquidity arrangements, credit default swaps and other derivative contracts. Involvements with these unconsolidated VIEs are recorded on our balance sheet in trading assets, investment securities, loans, MSRs, derivative assets and liabilities, other assets, other liabilities, and long-term debt, as appropriate.

Table 8.2 provides a summary of unconsolidated VIEs with which we have significant continuing involvement, but we are not the primary beneficiary. We do not consider our continuing involvement in an unconsolidated VIE to be significant when it relates to third-party sponsored VIEs for which we were not the transferor (unless we are servicer and have other significant forms of involvement) or if we were the sponsor only or sponsor and servicer but do not have any other forms of significant involvement.

Significant continuing involvement includes transactions where we were the sponsor or transferor and have other significant forms of involvement. Sponsorship includes transactions with unconsolidated VIEs where we solely or materially participated in the initial design or structuring of the entity or marketing of the transaction to investors. When we transfer assets to a VIE and account for the transfer as a sale, we are considered the transferor. We consider investments in securities (other than those held temporarily in trading), loans, guarantees, liquidity agreements, written options and servicing of collateral to be other forms of involvement that may be significant. We have excluded certain transactions with unconsolidated VIEs from the balances presented in the following table where we have determined that our continuing involvement is not significant due to the temporary nature and size of our variable interests, because we were not the transferor or because we were not involved in the design of the unconsolidated VIEs. We also exclude from the table secured borrowing transactions with unconsolidated VIEs (for information on these transactions, see the Transactions with Consolidated VIEs and Secured Borrowings section in this Note).

Table 8.2: Unconsolidated VIEs

		Carrying value – asset (liability)				
(in millions)	Total VIE assets	Debt and equity interests (1)	Servicing assets	Derivatives	Other commitments and guarantees	Net assets
December 31, 2017						
Residential mortgage loan securitizations:						
Conforming (2)	$ 1,169,410	2,100	12,665	—	(190)	14,575
Other/nonconforming	14,175	598	73	—	—	671
Commercial mortgage securitizations	144,650	2,198	890	28	(34)	3,082
Collateralized debt obligations:						
Debt securities	1,031	—	—	5	(20)	(15)
Loans (3)	1,481	1,443	—	—	—	1,443
Asset-based finance structures	2,333	1,867	—	—	—	1,867
Tax credit structures	31,852	11,258	—	—	(3,590)	7,668
Collateralized loan obligations	23	1	—	—	—	1
Investment funds	225	50	—	—	—	50
Other (4)	2,257	577	—	(95)	—	482
Total	$ 1,367,437	20,092	13,628	(62)	(3,834)	29,824

	Maximum exposure to loss				
	Debt and equity interests (1)	Servicing assets	Derivatives	Other commitments and guarantees	Total exposure
Residential mortgage loan securitizations:					
Conforming	$ 2,100	12,665	—	1,137	15,902
Other/nonconforming	598	73	—	—	671
Commercial mortgage securitizations	2,198	890	42	10,202	13,332
Collateralized debt obligations:					
Debt securities	—	—	5	20	25
Loans (3)	1,443	—	—	—	1,443
Asset-based finance structures	1,867	—	—	71	1,938
Tax credit structures	11,258	—	—	1,175	12,433
Collateralized loan obligations	1	—	—	—	1
Investment funds	50	—	—	—	50
Other (4)	577	—	120	157	854
Total	$ 20,092	13,628	167	12,762	46,649

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		Carrying value - asset (liability)				
(in millions)	Total VIE assets	Debt and equity interests (1)	Servicing assets	Derivatives	Other commitments and guarantees	Net assets
December 31, 2016						
Residential mortgage loan securitizations:						
Conforming (2)	$ 1,166,296	3,026	12,434	—	(232)	15,228
Other/nonconforming	18,805	873	109	—	(2)	980
Commercial mortgage securitizations	166,596	4,258	843	87	(35)	5,153
Collateralized debt obligations:						
Debt securities	1,472	—	—	—	(25)	(25)
Loans (3)	1,545	1,507	—	—	—	1,507
Asset-based finance structures	9,152	6,522	—	—	—	6,522
Tax credit structures	29,713	10,669	—	—	(3,609)	7,060
Collateralized loan obligations	78	10	—	—	—	10
Investment funds	214	48	—	—	—	48
Other (4)	1,733	630	—	(56)	—	574
Total	$ 1,395,604	27,543	13,386	31	(3,903)	37,057

	Maximum exposure to loss				
	Debt and equity interests (1)	Servicing assets	Derivatives	Other commitments and guarantees	Total exposure
Residential mortgage loan securitizations:					
Conforming	$ 3,026	12,434	—	979	16,439
Other/nonconforming	873	109	—	2	984
Commercial mortgage securitizations	4,258	843	94	9,566	14,761
Collateralized debt obligations:					
Debt securities	—	—	—	25	25
Loans (3)	1,507	—	—	—	1,507
Asset-based finance structures	6,522	—	—	72	6,594
Tax credit structures	10,669	—	—	1,104	11,773
Collateralized loan obligations	10	—	—	—	10
Investment funds	48	—	—	—	48
Other (4)	630	—	93	—	723
Total	$ 27,543	13,386	187	11,748	52,864

(1) Includes total equity interests of $10.7 billion and $10.3 billion at December 31, 2017 and 2016, respectively. Also includes debt interests in the form of both loans and securities. Excludes certain debt securities held related to loans serviced for FNMA, FHLMC and GNMA.
(2) Excludes assets and related liabilities with a recorded carrying value on our balance sheet of $2.2 billion and $1.2 billion at December 31, 2017 and 2016, respectively, for certain delinquent loans that are eligible for repurchase from GNMA loan securitizations. The recorded carrying value represents the amount that would be payable if the Company was to exercise the repurchase option. The carrying amounts are excluded from the table because the loans eligible for repurchase do not represent interests in the VIEs.
(3) Represents senior loans to trusts that are collateralized by asset-backed securities. The trusts invest predominantly in senior tranches from a diversified pool of U.S. asset securitizations, of which all are current and 100% were rated as investment grade by the primary rating agencies at both December 31, 2017 and 2016. These senior loans are accounted for at amortized cost and are subject to the Company's allowance and credit charge-off policies.
(4) Includes structured financing and credit-linked note structures. Also contains investments in auction rate securities (ARS) issued by VIEs that we do not sponsor and, accordingly, are unable to obtain the total assets of the entity.

In Table 8.2, "Total VIE assets" represents the remaining principal balance of assets held by unconsolidated VIEs using the most current information available. For VIEs that obtain exposure to assets synthetically through derivative instruments, the remaining notional amount of the derivative is included in the asset balance. "Carrying value" is the amount in our consolidated balance sheet related to our involvement with the unconsolidated VIEs. "Maximum exposure to loss" from our involvement with off-balance sheet entities, which is a required disclosure under GAAP, is determined as the carrying value of our involvement with off-balance sheet (unconsolidated) VIEs plus the remaining undrawn liquidity and lending commitments, the notional amount of net written derivative contracts, and generally the notional amount of, or stressed loss estimate for, other commitments and guarantees. It represents estimated loss that would be incurred under severe, hypothetical circumstances, for which we believe the possibility is extremely remote, such as where the value of our interests and any associated collateral declines to zero, without any consideration of recovery or offset from any economic hedges. Accordingly, this required disclosure is not an indication of expected loss.

RESIDENTIAL MORTGAGE LOANS Residential mortgage loan securitizations are financed through the issuance of fixed-rate or floating-rate asset-backed securities, which are collateralized by the loans transferred to a VIE. We typically transfer loans we originated to these VIEs, account for the transfers as sales, retain the right to service the loans and may hold other beneficial interests issued by the VIEs. We also may be exposed to limited liability related to recourse agreements and repurchase agreements we make to our issuers and purchasers, which are included in other commitments and guarantees. In certain instances, we may service residential mortgage loan securitizations structured by third parties whose loans we did not originate or transfer. Our residential mortgage loan securitizations consist of conforming and nonconforming securitizations.

Conforming residential mortgage loan securitizations are those that are guaranteed by the GSEs, including GNMA. Because of the power of the GSEs over the VIEs that hold the assets from these conforming residential mortgage loan securitizations, we do not consolidate them.

The loans sold to the VIEs in nonconforming residential mortgage loan securitizations are those that do not qualify for a GSE guarantee. We may hold variable interests issued by the VIEs, including senior securities. We do not consolidate the nonconforming residential mortgage loan securitizations included in the table because we either do not hold any variable interests, hold variable interests that we do not consider potentially significant or are not the primary servicer for a majority of the VIE assets.

Other commitments and guarantees include amounts related to loans sold that we may be required to repurchase, or otherwise indemnify or reimburse the investor or insurer for losses incurred, due to material breach of contractual representations and warranties as well as other retained recourse arrangements. The maximum exposure to loss for material breach of contractual representations and warranties represents a stressed case estimate we utilize for determining stressed case regulatory capital needs and is considered to be a remote scenario.

COMMERCIAL MORTGAGE LOAN SECURITIZATIONS Commercial mortgage loan securitizations are financed through the issuance of fixed or floating-rate asset-backed securities, which are collateralized by the loans transferred to the VIE. In a typical securitization, we may transfer loans we originate to these VIEs, account for the transfers as sales, retain the right to service the loans and may hold other beneficial interests issued by the VIEs. In certain instances, we may service commercial mortgage loan securitizations structured by third parties whose loans we did not originate or transfer. We typically serve as primary or master servicer of these VIEs. The primary or master servicer in a commercial mortgage loan securitization typically cannot make the most significant decisions impacting the performance of the VIE and therefore does not have power over the VIE. We do not consolidate the commercial mortgage loan securitizations included in the disclosure because we either do not have power or do not have a variable interest that could potentially be significant to the VIE.

COLLATERALIZED DEBT OBLIGATIONS (CDOs) A CDO is a securitization where a VIE purchases a pool of assets consisting of asset-backed securities and issues multiple tranches of equity or notes to investors. In some CDOs, a portion of the assets are obtained synthetically through the use of derivatives such as credit default swaps or total return swaps.

In addition to our role as arranger, we may have other forms of involvement with these CDOs. Such involvement may include acting as liquidity provider, derivative counterparty, secondary market maker or investor. For certain CDOs, we may also act as the collateral manager or servicer. We receive fees in connection with our role as collateral manager or servicer.

We assess whether we are the primary beneficiary of CDOs based on our role in them in combination with the variable interests we hold. Subsequently, we monitor our ongoing involvement to determine if the nature of our involvement has changed. We are not the primary beneficiary of these CDOs in most cases because we do not act as the collateral manager or servicer, which generally denotes power. In cases where we are the collateral manager or servicer, we are not the primary beneficiary because we do not hold interests that could potentially be significant to the VIE.

COLLATERALIZED LOAN OBLIGATIONS (CLOs) A CLO is a securitization where an SPE purchases a pool of assets consisting of loans and issues multiple tranches of equity or notes to investors. Generally, CLOs are structured on behalf of a third party asset manager that typically selects and manages the assets for the term of the CLO. Typically, the asset manager has the power over the significant decisions of the VIE through its discretion to manage the assets of the CLO. We assess whether we are the primary beneficiary of CLOs based on our role in them and the variable interests we hold. In most cases, we are not the primary beneficiary because we do not have the power to manage the collateral in the VIE.

In addition to our role as arranger, we may have other forms of involvement with these CLOs. Such involvement may include acting as underwriter, derivative counterparty, secondary market maker or investor. For certain CLOs, we may also act as the servicer, for which we receive fees in connection with that role. We also earn fees for arranging these CLOs and distributing the securities.

ASSET-BASED FINANCE STRUCTURES We engage in various forms of structured finance arrangements with VIEs that are collateralized by various asset classes including energy contracts, automobile and other transportation loans and leases, intellectual property, equipment and general corporate credit. We typically provide senior financing, and may act as an interest rate swap or commodity derivative counterparty when necessary. In most cases, we are not the primary beneficiary of these structures because we do not have power over the significant activities of the VIEs involved in them.

For example, we have investments in asset-backed securities that are collateralized by automobile leases or loans and cash. These fixed-rate and variable-rate securities have been structured as single-tranche, fully amortizing, unrated bonds that are equivalent to investment-grade securities due to their significant overcollateralization. The securities are issued by VIEs that have been formed by third party automobile financing institutions primarily because they require a source of liquidity to fund ongoing vehicle sales operations. The third party automobile financing institutions manage the collateral in the VIEs, which is indicative of power in them and we therefore do not consolidate these VIEs.

TAX CREDIT STRUCTURES We co-sponsor and make investments in affordable housing and sustainable energy projects that are designed to generate a return primarily through the realization of federal tax credits. In some instances, our investments in these structures may require that we fund future capital commitments at the discretion of the project sponsors. While the size of our investment in a single entity may at times exceed 50% of the outstanding equity interests, we do not consolidate these structures due to the project sponsor's ability to manage the projects, which is indicative of power in them.

INVESTMENT FUNDS Subsequent to adopting ASU 2015-02 (*Amendments to the Consolidation Analysis*) in first quarter 2016, we do not consolidate these investment funds because we do not hold variable interests that are considered significant to the funds.

We voluntarily waived a portion of our management fees for certain money market funds that are exempt from the consolidation analysis to ensure the funds maintained a minimum level of daily net investment income. The amount of fees waived in 2017 and 2016 was $53 million and $109 million, respectively.

OTHER TRANSACTIONS WITH VIEs Other VIEs include certain entities that issue auction rate securities (ARS) which are debt instruments with long-term maturities, that re-price more frequently, and preferred equities with no maturity. At December 31, 2017, we held $400 million of ARS issued by VIEs compared with $453 million at December 31, 2016. We acquired the ARS pursuant to agreements entered into in 2008 and 2009.

We do not consolidate the VIEs that issued the ARS because we do not have power over the activities of the VIEs.

TRUST PREFERRED SECURITIES VIEs that we wholly own issue debt securities or preferred equity to third party investors. All of the proceeds of the issuance are invested in debt securities or preferred equity that we issue to the VIEs. The VIEs' operations and cash flows relate only to the issuance, administration and repayment of the securities held by third parties. We do not consolidate these VIEs because the sole assets of the VIEs are receivables from us, even though we own all of the voting equity shares of the VIEs, have fully guaranteed the obligations of the VIEs and may have the right to redeem the third party securities under certain circumstances. In our consolidated balance sheet at December 31, 2017 and 2016, we reported the debt securities issued to the VIEs as long-term junior subordinated debt with a carrying value of $2.0 billion and $2.1 billion, respectively, and the preferred equity securities issued to the VIEs as preferred stock with a carrying value of $2.5 billion at both dates. These amounts are in addition to the involvements in these VIEs included in the preceding table.

In 2017, we redeemed $150 million of trust preferred securities which were partially included in Tier 2 capital (50% credit in 2017) in the transitional framework and were not included under the fully-phased framework under the Basel III standards.

Loan Sales and Securitization Activity

We periodically transfer consumer and CRE loans and other types of financial assets in securitization and whole loan sale transactions. We typically retain the servicing rights from these sales and may continue to hold other beneficial interests in the transferred financial assets. We may also provide liquidity to investors in the beneficial interests and credit enhancements in the form of standby letters of credit. Through these transfers we may be exposed to liability under limited amounts of recourse as well as standard representations and warranties we make to purchasers and issuers. Table 8.3 presents the cash flows for our transfers accounted for as sales.

Table 8.3: Cash Flows From Sales and Securitization Activity

						Year ended December 31,
	2017		2016		2015	
(in millions)	**Mortgage loans**	**Other financial assets**	Mortgage loans	Other financial assets	Mortgage loans	Other financial assets
Proceeds from securitizations and whole loan sales	**$ 228,282**	**25**	252,723	347	202,335	531
Fees from servicing rights retained	**3,352**	**—**	3,492	—	3,675	5
Cash flows from other interests held (1)	**2,218**	**1**	2,898	1	1,297	38
Repurchases of assets/loss reimbursements (2):						
Non-agency securitizations and whole loan transactions	**12**	**—**	26	—	14	—
Agency securitizations (3)	**92**	**—**	133	—	300	—
Servicing advances, net of repayments	**(269)**	**—**	(218)	—	(764)	—

(1) Cash flows from other interests held include principal and interest payments received on retained bonds and excess cash flows received on interest-only strips.
(2) Consists of cash paid to repurchase loans from investors and cash paid to investors to reimburse them for losses on individual loans that are already liquidated. In addition, during 2017, we paid nothing to third-party investors to settle repurchase liabilities on pools of loans, compared with $11 million and $19 million in 2016 and 2015, respectively.
(3) Represent loans repurchased from GNMA, FNMA, and FHLMC under representation and warranty provisions included in our loan sales contracts. Excludes $8.6 billion in delinquent insured/guaranteed loans that we service and have exercised our option to purchase out of GNMA pools in 2017, compared with $9.9 billion and $11.3 billion in 2016 and 2015, respectively. These loans are predominantly insured by the FHA or guaranteed by the VA.

In 2017, 2016, and 2015, we recognized net gains of $701 million, $524 million and $506 million, respectively, from transfers accounted for as sales of financial assets. These net gains primarily relate to commercial mortgage securitizations and residential mortgage securitizations where the loans were not already carried at fair value.

Sales with continuing involvement during 2017, 2016 and 2015 largely related to securitizations of residential mortgages that are sold to the government-sponsored entities (GSEs), including FNMA, FHLMC and GNMA (conforming residential mortgage securitizations). During 2017, 2016 and 2015 we transferred $213.6 billion, $236.6 billion and $186.6 billion, respectively, in fair value of residential mortgages to unconsolidated VIEs and third-party investors and recorded the transfers as sales. Substantially all of these transfers did not result in a gain or loss because the loans were already carried at fair value. In connection with all of these transfers, in 2017 we recorded a $2.1 billion servicing asset, measured at fair value using a Level 3 measurement technique, securities of $1.4 billion, classified as Level 2, and a $24 million liability for repurchase losses which reflects management's estimate of probable losses related to various representations and warranties for the loans transferred, initially measured at fair value. In 2016, we recorded a $2.1 billion servicing asset, securities of $4.4 billion and a $36 million liability. In 2015, we recorded a $1.6 billion servicing asset, securities of $1.9 billion and a $43 million liability.

Table 8.4 presents the key weighted-average assumptions we used to measure residential mortgage servicing rights at the date of securitization.

Table 8.4: Residential Mortgage Servicing Rights

	Residential mortgage servicing rights		
	2017	2016	2015
Year ended December 31,			
Prepayment speed (1)	**11.5%**	11.7	12.1
Discount rate	**7.0**	6.5	7.3
Cost to service ($ per loan) (2)	**$ 132**	132	223

(1) The prepayment speed assumption for residential mortgage servicing rights includes a blend of prepayment speeds and default rates. Prepayment speed assumptions are influenced by mortgage interest rate inputs as well as our estimation of drivers of borrower behavior.

(2) Includes costs to service and unreimbursed foreclosure costs, which can vary period to period depending on the mix of modified government-guaranteed loans sold to GNMA.

During 2017, 2016 and 2015, we transferred $16.7 billion, $18.3 billion and $17.3 billion, respectively, in carrying value of commercial mortgages to unconsolidated VIEs and third-party investors and recorded the transfers as sales. These transfers resulted in gains of $359 million in 2017, $429 million in 2016 and $338 million in 2015, respectively, because the loans were carried at lower of cost or market value (LOCOM). In connection with these transfers, in 2017 we recorded a servicing asset of $166 million, initially measured at fair value using a Level 3 measurement technique, and securities of $65 million, classified as Level 2. In 2016, we recorded a servicing asset of $270 million and securities of $258 million. In 2015, we recorded a servicing asset of $180 million and securities of $241 million.

Retained Interests from Unconsolidated VIEs

Table 8.5 provides key economic assumptions and the sensitivity of the current fair value of residential mortgage servicing rights and other interests held to immediate adverse changes in those assumptions. "Other interests held" relate to residential and commercial mortgage loan securitizations. Residential mortgage-backed securities retained in securitizations issued through GSEs, such as FNMA, FHLMC and GNMA, are excluded from the table because these securities have a remote risk of credit loss due to the GSE guarantee. These securities also have economic characteristics similar to GSE mortgage-backed securities that we purchase, which are not included in the table. Subordinated interests include only those bonds whose credit rating was below AAA by a major rating agency at issuance. Senior interests include only those bonds whose credit rating was AAA by a major rating agency at issuance. The information presented excludes trading positions held in inventory.

Table 8.5: Retained Interests from Unconsolidated VIEs

			Other interests held		
			Consumer	Commercial (2)	
($ in millions, except cost to service amounts)	Residential mortgage servicing rights (1)	Interest-only strips	Subordinated bonds	Subordinated bonds	Senior bonds
Fair value of interests held at December 31, 2017	**$ 13,625**	**19**	**—**	**596**	**468**
Expected weighted-average life (in years)	**6.2**	**3.3**	**0.0**	**6.7**	**5.2**
Key economic assumptions:					
Prepayment speed assumption (3)	**10.5%**	**20.0**	**—**		
Decrease in fair value from:					
10% adverse change	**$ 565**	**1**	**—**		
25% adverse change	**1,337**	**2**	**—**		
Discount rate assumption	**6.9%**	**14.8**	**—**	**4.1**	**3.1**
Decrease in fair value from:					
100 basis point increase	**$ 652**	**—**	**—**	**32**	**20**
200 basis point increase	**1,246**	**1**	**—**	**61**	**39**
Cost to service assumption ($ per loan)	**143**				
Decrease in fair value from:					
10% adverse change	**467**				
25% adverse change	**1,169**				
Credit loss assumption			**—%**	**1.8**	**—**
Decrease in fair value from:					
10% higher losses			**$ —**	**—**	**—**
25% higher losses			**—**	**—**	**—**
Fair value of interests held at December 31, 2016	$ 12,959	28	1	249	552
Expected weighted-average life (in years)	6.3	3.9	8.3	3.1	5.1
Key economic assumptions:					
Prepayment speed assumption (3)	10.3 %	17.4	13.5		
Decrease in fair value from:					
10% adverse change	$ 583	1	—		
25% adverse change	1,385	2	—		
Discount rate assumption	6.8 %	13.3	10.7	5.2	2.7
Decrease in fair value from:					
100 basis point increase	$ 649	1	—	7	23
200 basis point increase	1,239	1	—	12	45
Cost to service assumption ($ per loan)	155				
Decrease in fair value from:					
10% adverse change	515				
25% adverse change	1,282				
Credit loss assumption			3.0 %	4.7	—
Decrease in fair value from:					
10% higher losses			$ —	—	—
25% higher losses			—	—	—

(1) See narrative following this table for a discussion of commercial mortgage servicing rights.
(2) Prepayment speed assumptions do not significantly impact the value of commercial mortgage securitization bonds as the underlying commercial mortgage loans experience significantly lower prepayments due to certain contractual restrictions, impacting the borrower's ability to prepay the mortgage.
(3) The prepayment speed assumption for residential mortgage servicing rights includes a blend of prepayment speeds and default rates. Prepayment speed assumptions are influenced by mortgage interest rate inputs as well as our estimation of drivers of borrower behavior.

In addition to residential mortgage servicing rights (MSRs) included in the previous table, we have a small portfolio of commercial MSRs with a fair value of $2.0 billion at both December 31, 2017 and 2016. The nature of our commercial MSRs, which are carried at LOCOM, is different from our residential MSRs. Prepayment activity on serviced loans does not significantly impact the value of commercial MSRs because, unlike residential mortgages, commercial mortgages experience significantly lower prepayments due to certain contractual restrictions, impacting the borrower's ability to prepay the mortgage. Additionally, for our commercial MSR portfolio, we are typically master/primary servicer, but not the special servicer, who is separately responsible for the servicing and workout of delinquent and foreclosed loans. It is the special servicer, similar to our role as servicer of residential mortgage loans, who is affected by higher servicing and foreclosure costs due to an increase in delinquent and foreclosed loans. Accordingly, prepayment speeds and costs to service are not key assumptions for commercial MSRs as they do not significantly impact the valuation. The primary economic driver impacting the fair value of our commercial MSRs is forward interest rates, which are derived from market observable yield curves used to price capital markets instruments. Market interest rates significantly affect interest earned on custodial deposit balances. The sensitivity of the current fair value to an immediate adverse 25% change in the assumption about interest earned on deposit balances at December 31, 2017, and 2016, results in a decrease in fair value of $278 million and $259 million, respectively. See Note 9 (Mortgage Banking Activities) for further information on our commercial MSRs.

We also have a loan to an unconsolidated third party VIE that we extended in fourth quarter 2014 in conjunction with our sale of government guaranteed student loans. The loan is carried at amortized cost and approximates fair value at December 31, 2017 and 2016. The carrying amount of the loan at December 31, 2017 and 2016, was $1.3 billion and $3.2 billion, respectively. The estimated fair value of the loan is considered a Level 3 measurement that is determined using discounted cash flows that are based on changes in the discount rate due to changes in the risk premium component (credit spreads). The primary economic assumption impacting the fair value of our loan is the discount rate. Changes in the credit loss assumption are not expected to affect the estimated fair value of the loan due to the government guarantee of the underlying collateral. The sensitivity of the current fair value to an immediate adverse increase of 200 basis points in the risk premium component of the discount rate assumption is a decrease in fair value of $25 million and $154 million at December 31, 2017 and 2016, respectively.

The sensitivities in the preceding paragraphs and table are hypothetical and caution should be exercised when relying on this data. Changes in value based on variations in assumptions generally cannot be extrapolated because the relationship of the change in the assumption to the change in value may not be linear. Also, the effect of a variation in a particular assumption on the value of the other interests held is calculated independently without changing any other assumptions. In reality, changes in one factor may result in changes in others (for example, changes in prepayment speed estimates could result in changes in the credit losses), which might magnify or counteract the sensitivities.

Off-Balance Sheet Loans

Table 8.6 presents information about the principal balances of off-balance sheet loans that were sold or securitized, including residential mortgage loans sold to FNMA, FHLMC, GNMA and other investors, for which we have some form of continuing involvement (including servicer). Delinquent loans include loans 90 days or more past due and loans in bankruptcy, regardless of delinquency status. For loans sold or securitized where servicing is our only form of continuing involvement, we would only experience a loss if we were required to repurchase a delinquent loan or foreclosed asset due to a breach in representations and warranties associated with our loan sale or servicing contracts.

Table 8.6: Off-Balance Sheet Loans Sold or Securitized

	Total loans		Delinquent loans and foreclosed assets (1)		Net charge-offs Year ended	
	December 31,		December 31,		December 31,	
(in millions)	**2017**	2016	**2017**	2016	**2017**	2016
Commercial:						
Real estate mortgage	$ **100,875**	106,745	**2,839**	3,325	**1,027**	279
Total commercial	**100,875**	106,745	**2,839**	3,325	**1,027**	279
Consumer:						
Real estate 1-4 family first mortgage	**1,126,208**	1,160,191	**13,393**	16,453	**735**	1,011
Total consumer	**1,126,208**	1,160,191	**13,393**	16,453	**735**	1,011
Total off-balance sheet sold or securitized loans (2)	$ **1,227,083**	1,266,936	**16,232**	19,778	**1,762**	1,290

(1) Includes $1.2 billion and $1.7 billion of commercial foreclosed assets and $879 million and $1.8 billion of consumer foreclosed assets at December 31, 2017 and 2016, respectively.
(2) At December 31, 2017 and 2016, the table includes total loans of $1.1 trillion and $1.2 trillion, delinquent loans of $9.1 billion and $9.8 billion, and foreclosed assets of $619 million and $1.3 billion, respectively, for FNMA, FHLMC and GNMA. Net charge-offs exclude loans sold to FNMA, FHLMC and GNMA as we do not service or manage the underlying real estate upon foreclosure and, as such, do not have access to net charge-off information.

Transactions with Consolidated VIEs and Secured Borrowings

Table 8.7 presents a summary of financial assets and liabilities for asset transfers accounted for as secured borrowings and involvements with consolidated VIEs. Carrying values of "Assets" are presented using GAAP measurement methods, which may include fair value, credit impairment or other adjustments, and therefore in some instances will differ from "Total VIE assets." For VIEs that obtain exposure synthetically through derivative instruments, the remaining notional amount of the derivative is included in "Total VIE assets." On the consolidated balance sheet, we separately disclose the consolidated assets of certain VIEs that can only be used to settle the liabilities of those VIEs.

Table 8.7: Transactions with Consolidated VIEs and Secured Borrowings

		Carrying value			
(in millions)	Total VIE assets	Assets	Liabilities	Noncontrolling interests	Net assets
December 31, 2017					
Secured borrowings:					
Municipal tender option bond securitizations	**$ 658**	**565**	**(532)**	**—**	**33**
Residential mortgage securitizations	**113**	**110**	**(111)**	**—**	**(1)**
Total secured borrowings	**771**	**675**	**(643)**	**—**	**32**
Consolidated VIEs:					
Commercial and industrial loans and leases	**9,116**	**8,626**	**(915)**	**(29)**	**7,682**
Nonconforming residential mortgage loan securitizations	**2,515**	**2,212**	**(694)**	**—**	**1,518**
Commercial real estate loans	**2,378**	**2,378**	**—**	**—**	**2,378**
Structured asset finance	**10**	**6**	**(4)**	**—**	**2**
Investment funds	**305**	**305**	**(2)**	**(230)**	**73**
Other	**100**	**90**	**(1)**	**(24)**	**65**
Total consolidated VIEs	**14,424**	**13,617**	**(1,616)**	**(283)**	**11,718**
Total secured borrowings and consolidated VIEs	**$ 15,195**	**14,292**	**(2,259)**	**(283)**	**11,750**
December 31, 2016					
Secured borrowings:					
Municipal tender option bond securitizations	$ 1,473	998	(907)	—	91
Residential mortgage securitizations	139	138	(136)	—	2
Total secured borrowings	1,612	1,136	(1,043)	—	93
Consolidated VIEs:					
Commercial and industrial loans and leases	8,821	8,623	(2,819)	(14)	5,790
Nonconforming residential mortgage loan securitizations	3,349	2,974	(1,003)	—	1,971
Commercial real estate loans	1,516	1,516	—	—	1,516
Structured asset finance	23	13	(9)	—	4
Investment funds	142	142	(2)	(67)	73
Other	166	146	(1)	(57)	88
Total consolidated VIEs	14,017	13,414	(3,834)	(138)	9,442
Total secured borrowings and consolidated VIEs	$ 15,629	14,550	(4,877)	(138)	9,535

In addition to the structure types included in the previous table, at December 31, 2016, we had approximately $6.0 billion of private placement debt financing issued through a consolidated VIE. The issuance was classified as long-term debt in our consolidated financial statements. At December 31, 2016, we pledged approximately $434 million in loans (principal and interest eligible to be capitalized), and $6.1 billion in available-for-sale securities to collateralize the VIE's borrowings. These assets were not transferred to the VIE, and accordingly, we have excluded the VIE from the previous table. During 2017, the private placement debt financing was repaid, and the entity was no longer considered a VIE.

We have raised financing through the securitization of certain financial assets in transactions with VIEs accounted for as secured borrowings. We also consolidate VIEs where we are the primary beneficiary. In certain transactions, we provide contractual support in the form of limited recourse and liquidity to facilitate the remarketing of short-term securities issued to third party investors. Other than this limited contractual support, the assets of the VIEs are the sole source of repayment of the securities held by third parties.

MUNICIPAL TENDER OPTION BOND SECURITIZATIONS As part of our normal investment portfolio activities, we consolidate municipal bond trusts that hold highly rated, long-term, fixed-rate municipal bonds, the majority of which are rated AA or better. Our residual interests in these trusts generally allow us to capture the economics of owning the securities outright, and constructively make decisions that significantly impact the economic performance of the municipal bond vehicle, primarily by directing the sale of the municipal bonds owned by the vehicle. In addition, the residual interest owners have the right to receive benefits and bear losses that are proportional to owning the underlying municipal bonds in the trusts. The trusts obtain financing by issuing floating-rate trust certificates that reprice on a weekly or other basis to third-party investors. Under certain conditions, if we elect to terminate the trusts and withdraw the underlying assets, the third party investors are entitled to a small portion of any unrealized gain on the underlying assets. We may serve as remarketing agent and/or liquidity provider for the trusts. The floating-rate investors have the right to tender the certificates at specified dates, often with as little as seven days' notice. Should we be unable to remarket the tendered certificates, we are generally obligated to purchase them at par under standby liquidity facilities unless the bond's credit rating has declined below investment grade or there has been an event of default or bankruptcy of the issuer and insurer.

COMMERCIAL AND INDUSTRIAL LOANS AND LEASES In conjunction with the GE Capital business acquisitions, on March 1, 2016, we acquired certain consolidated SPE entities. The most significant of these SPEs is a revolving master trust entity that purchases dealer floorplan loans and issues senior and subordinated notes. The senior notes are held by third parties and the subordinated notes and residual equity interests are held by us. At December 31, 2017 and 2016, total assets held by the master trust were $7.6 billion and $7.5 billion, respectively, and the outstanding senior notes were $773 million and $2.7 billion, respectively. The other SPEs acquired include securitization term trust entities, which purchase vendor finance lease and loan assets and issue notes to investors, and an SPE that engages in leasing activities to specific vendors. As of December 31, 2016, all outstanding third party debt of the securitization term trust entities was repaid in accordance with the agreements, and the remaining assets were repurchased by Wells Fargo. The securitization term trusts were dissolved during 2017. The remaining other SPE held $1.4 billion and $1.2 billion in total assets at December 31, 2017 and 2016, respectively. We are the primary beneficiary of these acquired SPEs due to our ability to direct the significant activities of the SPEs, such as our role as servicer, and because we hold variable interests that are considered significant.

NONCONFORMING RESIDENTIAL MORTGAGE LOAN SECURITIZATIONS We have consolidated certain of our nonconforming residential mortgage loan securitizations in accordance with consolidation accounting guidance. We have determined we are the primary beneficiary of these securitizations because we have the power to direct the most significant activities of the entity through our role as primary servicer and also hold variable interests that we have determined to be significant. The nature of our variable interests in these entities may include beneficial interests issued by the VIE, mortgage servicing rights and recourse or repurchase reserve liabilities. The beneficial interests issued by the VIE that we hold include either subordinate or senior securities held in an amount that we consider potentially significant.

INVESTMENT FUNDS Subsequent to adopting ASU 2015-02 (*Amendments to the Consolidation Analysis*) in first quarter 2016, we consolidate certain investment funds because we have both the power to manage fund assets and hold variable interests that are considered significant.

Note 9: Mortgage Banking Activities

Mortgage banking activities, included in the Community Banking and Wholesale Banking operating segments, consist of residential and commercial mortgage originations, sale activity and servicing.

We apply the amortization method to commercial MSRs and apply the fair value method to residential MSRs. Table 9.1 presents the changes in MSRs measured using the fair value method.

Table 9.1: Analysis of Changes in Fair Value MSRs

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Fair value, beginning of year	**$ 12,959**	12,415	12,738
Purchases	**541**	—	—
Servicing from securitizations or asset transfers (1)	**2,263**	2,204	1,556
Sales and other (2)	**(23)**	(65)	(9)
Net additions	**2,781**	2,139	1,547
Changes in fair value:			
Due to changes in valuation model inputs or assumptions:			
Mortgage interest rates (3)	**(103)**	543	247
Servicing and foreclosure costs (4)	**96**	106	(83)
Discount rates (5)	**13**	—	—
Prepayment estimates and other (6)	**(132)**	(84)	50
Net changes in valuation model inputs or assumptions	**(126)**	565	214
Changes due to collection/realization of expected cash flows over time	**(1,989)**	(2,160)	(2,084)
Total changes in fair value	**(2,115)**	(1,595)	(1,870)
Fair value, end of year	**$ 13,625**	12,959	12,415

(1) Includes impacts associated with exercising our right to repurchase delinquent loans from GNMA loan securitization pools.
(2) Includes sales and transfers of MSRs, which can result in an increase of total reported MSRs if the sales or transfers are related to nonperforming loan portfolios or portfolios with servicing liabilities.
(3) Includes prepayment speed changes as well as other valuation changes due to changes in mortgage interest rates (such as changes in estimated interest earned on custodial deposit balances).
(4) Includes costs to service and unreimbursed foreclosure costs.
(5) Reflects discount rate assumption change, excluding portion attributable to changes in mortgage interest rates.
(6) Represents changes driven by other valuation model inputs or assumptions including prepayment speed estimation changes and other assumption updates. Prepayment speed estimation changes are influenced by observed changes in borrower behavior and other external factors that occur independent of interest rate changes.

Table 9.2 presents the changes in amortized MSRs.

Table 9.2: Analysis of Changes in Amortized MSRs

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Balance, beginning of year	**$ 1,406**	1,308	1,242
Purchases	**115**	97	144
Servicing from securitizations or asset transfers	**166**	270	180
Amortization	**(263)**	(269)	(258)
Balance, end of year (1)	**$ 1,424**	1,406	1,308
Fair value of amortized MSRs:			
Beginning of year	**$ 1,956**	1,680	1,637
End of year	**2,025**	1,956	1,680

(1) Commercial amortized MSRs are evaluated for impairment purposes by the following risk strata: agency (GSEs) for multi-family properties and non-agency. There was no valuation allowance recorded for the periods presented on the commercial amortized MSRs.

We present the components of our managed servicing portfolio in Table 9.3 at unpaid principal balance for loans serviced and subserviced for others and at book value for owned loans serviced.

Table 9.3: Managed Servicing Portfolio

(in billions)		Dec 31, 2017	Dec 31, 2016
Residential mortgage servicing:			
Serviced for others	$	**1,209**	1,205
Owned loans serviced		**342**	347
Subserviced for others		**3**	8
Total residential servicing		**1,554**	1,560
Commercial mortgage servicing:			
Serviced for others		**495**	479
Owned loans serviced		**127**	132
Subserviced for others		**9**	8
Total commercial servicing		**631**	619
Total managed servicing portfolio	$	**2,185**	2,179
Total serviced for others	$	**1,704**	1,684
Ratio of MSRs to related loans serviced for others		**0.88%**	0.85

Table 9.4 presents the components of mortgage banking noninterest income.

Table 9.4: Mortgage Banking Noninterest Income

			Year ended December 31,		
(in millions)			2017	2016	2015
Servicing income, net:					
Servicing fees:					
Contractually specified servicing fees		$	**3,603**	3,778	4,037
Late charges			**172**	180	198
Ancillary fees			**199**	229	288
Unreimbursed direct servicing costs (1)			**(582)**	(819)	(625)
Net servicing fees			**3,392**	3,368	3,898
Changes in fair value of MSRs carried at fair value:					
Due to changes in valuation model inputs or assumptions (2)	(A)		**(126)**	565	214
Changes due to collection/realization of expected cash flows over time			**(1,989)**	(2,160)	(2,084)
Total changes in fair value of MSRs carried at fair value			**(2,115)**	(1,595)	(1,870)
Amortization			**(263)**	(269)	(258)
Net derivative gains from economic hedges (3)	(B)		**413**	261	671
Total servicing income, net			**1,427**	1,765	2,441
Net gains on mortgage loan origination/sales activities			**2,923**	4,331	4,060
Total mortgage banking noninterest income		$	**4,350**	6,096	6,501
Market-related valuation changes to MSRs, net of hedge results (2)(3)	(A)+(B)	$	**287**	826	885

(1) Includes costs associated with foreclosures, unreimbursed interest advances to investors, and other interest costs.
(2) Refer to the analysis of changes in fair value MSRs presented in Table 9.1 in this Note for more detail.
(3) Represents results from economic hedges used to hedge the risk of changes in fair value of MSRs. See Note 16 (Derivatives Not Designated as Hedging Instruments) for additional discussion and detail.

Table 9.5 summarizes the changes in our liability for mortgage loan repurchase losses. This liability is in "Accrued expenses and other liabilities" in our consolidated balance sheet and adjustments to the repurchase liability are recorded in net gains on mortgage loan origination/sales activities in "Mortgage banking" in our consolidated income statement. Because the level of mortgage loan repurchase losses depends upon economic factors, investor demand strategies and other external conditions that may change over the life of the underlying loans, the level of the liability for mortgage loan repurchase losses is difficult to estimate and requires considerable management judgment. We maintain regular contact with the GSEs, the Federal Housing Finance Agency (FHFA), and other significant investors to monitor their repurchase demand practices and issues as part of our process to update our repurchase liability estimate as new information becomes available.

Because of the uncertainty in the various estimates underlying the mortgage repurchase liability, there is a range of losses in excess of the recorded mortgage repurchase liability that is reasonably possible. The estimate of the range of possible loss for representations and warranties does not represent a probable loss, and is based on currently available information, significant judgment, and a number of assumptions that are subject to change. The high end of this range of reasonably possible losses exceeded our recorded liability by $136 million at December 31, 2017, and was determined based upon modifying the assumptions (particularly to assume significant changes in investor repurchase demand practices) used in our best estimate of probable loss to reflect what we believe to be the high end of reasonably possible adverse assumptions.

Table 9.5: Analysis of Changes in Liability for Mortgage Loan Repurchase Losses

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Balance, beginning of year	**$ 229**	378	615
Assumed with MSR purchases (1)	**10**	—	—
Provision for repurchase losses:			
Loan sales	**24**	36	43
Change in estimate (2)	**(63)**	(139)	(202)
Net reductions to provision	**(39)**	(103)	(159)
Losses	**(19)**	(46)	(78)
Balance, end of year	**$ 181**	229	378

(1) Represents repurchase liability associated with portfolio of loans underlying mortgage servicing rights acquired during the period.
(2) Results from changes in investor demand and mortgage insurer practices, credit deterioration and changes in the financial stability of correspondent lenders.

Note 10: Intangible Assets

Table 10.1 presents the gross carrying value of intangible assets and accumulated amortization.

Table 10.1: Intangible Assets

	December 31, 2017			December 31, 2016		
(in millions)	**Gross carrying value**	**Accumulated amortization**	**Net carrying value**	Gross carrying value	Accumulated amortization	Net carrying value
Amortized intangible assets (1):						
MSRs (2)	**$ 3,876**	**(2,452)**	**1,424**	3,595	(2,189)	1,406
Core deposit intangibles	**12,834**	**(12,065)**	**769**	12,834	(11,214)	1,620
Customer relationship and other intangibles	**3,994**	**(3,153)**	**841**	3,928	(2,839)	1,089
Total amortized intangible assets	**$ 20,704**	**(17,670)**	**3,034**	20,357	(16,242)	4,115
Unamortized intangible assets:						
MSRs (carried at fair value) (2)	**$ 13,625**			12,959		
Goodwill	**26,587**			26,693		
Trademark	**14**			14		

(1) Excludes fully amortized intangible assets.
(2) See Note 9 (Mortgage Banking Activities) for additional information on MSRs.

Table 10.2 provides the current year and estimated future amortization expense for amortized intangible assets. We based our projections of amortization expense shown below on existing asset balances at December 31, 2017. Future amortization expense may vary from these projections.

Table 10.2: Amortization Expense for Intangible Assets

(in millions)	Amortized MSRs	Core deposit intangibles	Customer relationship and other intangibles (1)	Total
Year ended December 31, 2017 (actual)	**$ 263**	**851**	**314**	**1,428**
Estimate for year ended December 31,				
2018	$ 255	769	299	1,323
2019	223	—	116	339
2020	200	—	96	296
2021	172	—	82	254
2022	152	—	68	220

(1) The year ended December 31, 2017 balance includes $13 million for lease intangible amortization.

Table 10.3 shows the allocation of goodwill to our reportable operating segments.

Table 10.3: Goodwill

(in millions)		Community Banking	Wholesale Banking	Wealth and Investment Management	Consolidated Company
December 31, 2015	$	16,849	7,475	1,205	25,529
Reduction in goodwill related to divested businesses and other		—	(88)	(2)	(90)
Goodwill from business combinations		—	1,198	56	1,254
December 31, 2016	**$**	**16,849**	**8,585**	**1,259**	**26,693**
Reclassification of goodwill held for sale to Other Assets (1)		**—**	**(13)**	**—**	**(13)**
Reduction in goodwill related to divested businesses and other		**—**	**(117)**	**—**	**(117)**
Goodwill from business combinations		**—**	**—**	**24**	**24**
December 31, 2017 (1)	**$**	**16,849**	**8,455**	**1,283**	**26,587**

(1) Goodwill reclassified to held-for-sale in other assets of $13 million for the year ended December 31, 2017, relates to the sales agreement for Wells Fargo Shareowner Services. No goodwill was classified as held-for-sale in other assets at December 31, 2016 and 2015.

We assess goodwill for impairment at a reporting unit level, which is one level below the operating segments. Our goodwill was not impaired at December 31, 2017 and 2016. The fair values exceeded the carrying amount of our respective reporting units by approximately 32% to 635% at December 31, 2017. See Note 25 (Operating Segments) for further information on management reporting.

Note 11: Deposits

Table 11.1 presents a summary of the time certificates of deposit (CDs) and other time deposits issued by domestic and foreign offices.

Table 11.1: Time Certificates of Deposits and Other Time Deposits

(in billions)		Dec 31, 2017	Dec 31, 2016
Total domestic and foreign	$	128.6	107.9
Domestic:			
$100,000 or more		52.7	46.7
$250,000 or more		46.9	42.0
Foreign:			
$100,000 or more		13.4	11.6
$250,000 or more		13.4	11.6

Substantially all CDs and other time deposits issued by domestic and foreign offices were interest bearing and a significant portion of our foreign time deposits with a denomination of $100,000 or more have maturities of less than 7 days.

The contractual maturities of these deposits are presented in Table 11.2.

Table 11.2: Contractual Maturities of CDs and Other Time Deposits

(in millions)		December 31, 2017
2018	$	106,089
2019		8,432
2020		3,556
2021		2,864
2022		2,138
Thereafter		5,515
Total	$	128,594

The contractual maturities of the domestic time deposits with a denomination of $100,000 or more are presented in Table 11.3.

Table 11.3: Contractual Maturities of Domestic Time Deposits

(in millions)		2017
Three months or less	$	17,664
After three months through six months		14,413
After six months through twelve months		17,390
After twelve months		3,232
Total	$	52,699

Demand deposit overdrafts of $371 million and $548 million were included as loan balances at December 31, 2017 and 2016, respectively.

Note 12: Short-Term Borrowings

Table 12.1 shows selected information for short-term borrowings, which generally mature in less than 30 days. We pledge certain financial instruments that we own to collateralize repurchase agreements and other securities financings. For additional information, see the "Pledged Assets" section of Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments).

Table 12.1: Short-Term Borrowings

		2017		2016		2015
(in millions)	**Amount**	**Rate**	Amount	Rate	Amount	Rate
As of December 31,						
Federal funds purchased and securities sold under agreements to repurchase	**$ 88,684**	**1.30%**	$ 78,124	0.17%	$ 82,948	0.21%
Commercial paper	**—**	**—**	120	0.93	334	0.81
Other short-term borrowings (1)	**14,572**	**0.72**	18,537	0.28	14,246	(0.10)
Total	**$ 103,256**	**1.22**	$ 96,781	0.19	$ 97,528	0.17
Year ended December 31,						
Average daily balance						
Federal funds purchased and securities sold under agreements to repurchase	**$ 82,507**	**0.90**	$ 99,955	0.33	$ 75,021	0.09
Commercial paper	**16**	**0.95**	256	0.86	1,583	0.36
Other short-term borrowings (1)	**16,399**	**0.13**	14,976	0.02	10,861	(0.08)
Total	**$ 98,922**	**0.77**	$ 115,187	0.29	$ 87,465	0.07
Maximum month-end balance						
Federal funds purchased and securities sold under agreements to repurchase (2)	**$ 91,604**	**N/A**	$ 109,645	N/A	$ 89,800	N/A
Commercial paper (3)	**78**	**N/A**	519	N/A	3,552	N/A
Other short-term borrowings (4)	**19,439**	**N/A**	18,537	N/A	14,246	N/A

N/A- Not applicable
(1) Negative other short-term borrowings rate in 2015 is a result of increased customer demand for certain securities in stock loan transactions combined with the impact of low interest rates.
(2) Highest month-end balance in each of the last three years was November 2017, October 2016 and October 2015.
(3) Highest month-end balance in each of the last three years was January 2017, March 2016 and March 2015.
(4) Highest month-end balance in each of the last three years was February 2017, December 2016 and December 2015.

Note 13: Long-Term Debt

We issue long-term debt denominated in multiple currencies, largely in U.S. dollars. Our issuances have both fixed and floating interest rates. As a part of our overall interest rate risk management strategy, we often use derivatives to manage our exposure to interest rate risk. We also use derivatives to manage our exposure to foreign currency risk. As a result, a majority of the long-term debt presented below is hedged in a fair value or cash flow hedge relationship. See Note 16 (Derivatives) for further information on qualifying hedge contracts.

Table 13.1 presents a summary of our long-term debt carrying values, reflecting unamortized debt discounts and premiums, and purchase accounting adjustments, where applicable. The interest rates displayed represent the range of contractual rates in effect at December 31, 2017. These interest rates do not include the effects of any associated derivatives designated in a hedge accounting relationship.

Table 13.1: Long-Term Debt

			December 31,	
			2017	2016
(in millions)	Maturity date(s)	Stated interest rate(s)		
Wells Fargo & Company (Parent only)				
Senior				
Fixed-rate notes	2018-2045	0.375-6.75%	$ **84,652**	79,767
Floating-rate notes	2018-2048	0.090-3.010%	**22,463**	19,011
FixFloat notes	2028	3.58%	**2,961**	—
Structured notes (1)	2018-2056	0.090-5.9%	**7,442**	6,858
Total senior debt - Parent			**117,518**	105,636
Subordinated				
Fixed-rate notes (2)	2018-2046	3.45-7.57%	**27,132**	26,794
Total subordinated debt - Parent			**27,132**	26,794
Junior subordinated				
Fixed-rate notes - hybrid trust securities	2029-2036	5.95-7.95%	**1,369**	1,362
Floating-rate notes	2027	1.86-2.36%	**299**	290
Total junior subordinated debt - Parent (3)			**1,668**	1,652
Total long-term debt - Parent (2)			**146,318**	134,082
Wells Fargo Bank, N.A. and other bank entities (Bank)				
Senior				
Fixed-rate notes	2018-2019	1.65-2.15%	**7,732**	7,758
Floating-rate notes	2018-2053	1.13-2.16%	**4,317**	7,168
Floating-rate extendible notes (4)			**—**	68
Fixed-rate advances - Federal Home Loan Bank (FHLB) (5)	2018-2031	3.83-7.50%	**62**	79
Floating-rate advances - FHLB (5)	2018-2021	1.35-2.04%	**47,825**	77,075
Structured notes (1)	2018-2037	1.5-7.15%	**743**	1,238
Capital leases	2018-2029	2.870-17.775%	**39**	7
Total senior debt - Bank			**60,718**	93,393
Subordinated				
Fixed-rate notes	2023-2038	5.25-7.74%	**5,408**	6,500
Floating-rate notes			**—**	167
Total subordinated debt - Bank			**5,408**	6,667
Junior subordinated				
Floating-rate notes	2027	1.990-2.010%	**342**	332
Total junior subordinated debt - Bank (3)			**342**	332
Long-term debt issued by VIE - Fixed rate (6)	2020-2047	0.00-6.00%	**268**	371
Long-term debt issued by VIE - Floating rate (6)	2018-2047	1.645-15.737%	**1,211**	3,323
Mortgage notes and other debt (7)	2018-2051	0.2-9.25%	**7,291**	12,333
Total long-term debt - Bank			**75,238**	116,419

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			December 31,	
			2017	2016
(in millions)	Maturity date(s)	Stated interest rate(s)		
Other consolidated subsidiaries				
Senior				
Fixed-rate notes	2018-2023	2.78-3.46%	**3,390**	4,346
Structured notes (1)	2021	0.00-1.16%	**1**	1
Total senior debt - Other consolidated subsidiaries			**3,391**	4,347
Junior subordinated				
Floating-rate notes			**—**	155
Total junior subordinated debt - Other consolidated subsidiaries (3)			**—**	155
Mortgage notes and other (7)	2018	3.0-4.0%	**73**	74
Total long-term debt - Other consolidated subsidiaries			**3,464**	4,576
Total long-term debt			**$ 225,020**	255,077

(1) Largely consists of long-term notes where the performance of the note is linked to an embedded equity, commodity, or currency index, or basket of indices accounted for separately from the note as a free-standing derivative. For information on embedded derivatives, see the "Derivatives Not Designated as Hedging Instruments" section in Note 16 (Derivatives). In addition, a major portion consists of zero coupon callable notes where interest is paid as part of the final redemption amount.
(2) Includes fixed-rate subordinated notes issued by the Parent at a discount of $133 million and $135 million in 2017 and 2016, respectively, to effect a modification of Wells Fargo Bank, NA notes. These subordinated notes are carried at their par amount on the balance sheet of the Parent presented in Note 26 (Parent-Only Financial Statements). In addition, Parent long-term debt also includes debt issuance costs of $2 million in both 2017 and 2016, and affiliate related issuance costs of $323 million and $299 million in 2017 and 2016, respectively.
(3) Represents junior subordinated debentures held by unconsolidated wholly-owned trusts formed for the sole purpose of issuing trust preferred securities. See Note 8 (Securitizations and Variable Interest Entities) for additional information on our trust preferred security structures.
(4) Represents floating-rate extendible notes where holders of the notes may elect to extend the contractual maturity of all or a portion of the principal amount on a periodic basis.
(5) At December 31, 2017 and 2016, FHLB advances were secured by residential loan collateral.
(6) For additional information on VIEs, see Note 8 (Securitizations and Variable Interest Entities).
(7) A major portion related to securitizations and secured borrowings, see Note 8 (Securitizations and Variable Interest Entities).

We issue long-term debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. Long-term debt of $225.0 billion at December 31, 2017, decreased $30.1 billion from December 31, 2016.

The aggregate carrying value of long-term debt that matures (based on contractual payment dates) as of December 31, 2017, in each of the following five years and thereafter is presented in Table 13.2.

Table 13.2: Maturity of Long-Term Debt

						December 31, 2017	
(in millions)	2018	2019	2020	2021	2022	Thereafter	Total
Wells Fargo & Company (Parent Only)							
Senior notes	$ 7,987	6,816	13,323	18,027	18,284	53,081	117,518
Subordinated notes	613	—	—	—	—	26,519	27,132
Junior subordinated notes	—	—	—	—	—	1,668	1,668
Total long-term debt - Parent	$ 8,600	6,816	13,323	18,027	18,284	81,268	146,318
Wells Fargo Bank, N.A. and other bank entities (Bank)							
Senior notes	$ 27,612	22,369	2,011	8,487	42	197	60,718
Subordinated notes	—	—	—	—	—	5,408	5,408
Junior subordinated notes	—	—	—	—	—	342	342
Securitizations and other bank debt	2,742	1,012	1,009	228	151	3,628	8,770
Total long-term debt - Bank	$ 30,354	23,381	3,020	8,715	193	9,575	75,238
Other consolidated subsidiaries							
Senior notes	$ 799	1,190	—	1,003	—	399	3,391
Junior subordinated notes	—	—	—	—	—	—	—
Securitizations and other bank debt	73	—	—	—	—	—	73
Total long-term debt - Other consolidated subsidiaries	$ 872	1,190	—	1,003	—	399	3,464
Total long-term debt	$ 39,826	31,387	16,343	27,745	18,477	91,242	225,020

As part of our long-term and short-term borrowing arrangements, we are subject to various financial and operational covenants. Some of the agreements under which debt has been issued have provisions that may limit the merger or sale of certain subsidiary banks and the issuance of capital stock or convertible securities by certain subsidiary banks. At December 31, 2017, we were in compliance with all the covenants.

Note 14: Guarantees, Pledged Assets and Collateral, and Other Commitments

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in an underlying asset, liability, rate or index. Guarantees are generally in the form of standby letters of credit, securities lending and other indemnifications, written put options, recourse obligations, and other types of arrangements. Table 14.1 shows carrying value, maximum exposure to loss on our guarantees and the related non-investment grade amounts.

Table 14.1: Guarantees – Carrying Value and Maximum Exposure to Loss

			Maximum exposure to loss					
(in millions)		Carrying value of obligation (asset)	Expires in one year or less	Expires after one year through three years	Expires after three years through five years	Expires after five years	Total	Non-investment grade
December 31, 2017								
Standby letters of credit (1)	**$**	**39**	**15,357**	**7,908**	**3,068**	**645**	**26,978**	**8,773**
Securities lending and other indemnifications (2)		**—**	**—**	**—**	**2**	**809**	**811**	**2**
Written put options (3)		**(455)**	**14,758**	**12,706**	**3,890**	**1,038**	**32,392**	**19,087**
Loans and MHFS sold with recourse (4)		**51**	**165**	**533**	**934**	**9,385**	**11,017**	**8,155**
Factoring guarantees		**—**	**747**	**—**	**—**	**—**	**747**	**668**
Other guarantees		**1**	**7**	**—**	**2**	**4,175**	**4,184**	**7**
Total guarantees	**$**	**(364)**	**31,034**	**21,147**	**7,896**	**16,052**	**76,129**	**36,692**
December 31, 2016								
Standby letters of credit (1)	$	38	16,050	8,727	3,194	658	28,629	9,898
Securities lending and other indemnifications (2)		—	—	—	1	1,166	1,167	2
Written put options (3)		37	10,427	10,805	4,573	1,216	27,021	15,915
Loans and MHFS sold with recourse (4)		55	84	637	947	8,592	10,260	7,228
Factoring guarantees		—	1,109	—	—	—	1,109	1,109
Other guarantees		6	19	21	17	3,580	3,637	15
Total guarantees	$	136	27,689	20,190	8,732	15,212	71,823	34,167

(1) Total maximum exposure to loss includes direct pay letters of credit (DPLCs) of $8.1 billion and $9.2 billion at December 31, 2017 and 2016, respectively. We issue DPLCs to provide credit enhancements for certain bond issuances. Beneficiaries (bond trustees) may draw upon these instruments to make scheduled principal and interest payments, redeem all outstanding bonds because a default event has occurred, or for other reasons as permitted by the agreement. We also originate multipurpose lending commitments under which borrowers have the option to draw on the facility in one of several forms, including as a standby letter of credit. Total maximum exposure to loss includes the portion of these facilities for which we have issued standby letters of credit under the commitments.
(2) Includes indemnifications provided to certain third-party clearing agents. Outstanding customer obligations under these arrangements were $92 million and $175 million with related collateral of $717 million and $991 million at December 31, 2017 and 2016, respectively. Estimated maximum exposure to loss was $809 million at December 31, 2017, and $1.2 billion at December 31, 2016.
(3) Written put options, which are in the form of derivatives, are also included in the derivative disclosure in Note 16 (Derivatives). Carrying value net asset position is a result of certain deferred premium option trades.
(4) Represent recourse provided, predominantly to the GSEs, on loans sold under various programs and arrangements. Under these arrangements, we repurchased $5 million of loans associated with these agreements during both 2017 and 2016.

"Maximum exposure to loss" and "Non-investment grade" are required disclosures under GAAP. Non-investment grade represents those guarantees on which we have a higher risk of being required to perform under the terms of the guarantee. If the underlying assets under the guarantee are non-investment grade (that is, an external rating that is below investment grade or an internal credit default grade that is equivalent to a below investment grade external rating), we consider the risk of performance to be high. Internal credit default grades are determined based upon the same credit policies that we use to evaluate the risk of payment or performance when making loans and other extensions of credit. Credit quality indicators we usually consider in evaluating risk of payments or performance are described in Note 6 (Loans and Allowance for Credit Losses).

Maximum exposure to loss represents the estimated loss that would be incurred under an assumed hypothetical circumstance, despite what we believe is a remote possibility, where the value of our interests and any associated collateral declines to zero. Maximum exposure to loss estimates in Table 14.1 do not reflect economic hedges or collateral we could use to offset or recover losses we may incur under our guarantee agreements. Accordingly, this required disclosure is not an indication of expected loss. We believe the carrying value, which is either fair value for derivative-related products or the allowance for lending-related commitments, is more representative of our exposure to loss than maximum exposure to loss.

STANDBY LETTERS OF CREDIT We issue standby letters of credit, which include performance and financial guarantees, for customers in connection with contracts between our customers and third parties. Standby letters of credit are agreements where we are obligated to make payment to a third party on behalf of a customer if the customer fails to meet their contractual obligations. We consider the credit risk in standby letters of credit and commercial and similar letters of credit in determining the allowance for credit losses.

SECURITIES LENDING AND OTHER INDEMNIFICATIONS As a securities lending agent, we lend debt and equity securities from participating institutional clients' portfolios to third-party borrowers. These arrangements are for an indefinite period of time, and we indemnify our clients against default by the borrower in returning these lent securities. This indemnity is supported by collateral received from the borrowers and is generally in the form of cash or highly liquid securities that are marked to market daily.

We use certain third-party clearing agents to clear and settle transactions on behalf of some of our institutional brokerage customers. We indemnify the clearing agents against loss that could occur for non-performance by our customers on transactions that are not sufficiently collateralized. Transactions subject to the indemnifications may include customer obligations related to the settlement of margin accounts and short positions, such as written call options and securities borrowing transactions.

We enter into other types of indemnification agreements in the ordinary course of business under which we agree to indemnify third parties against any damages, losses and expenses incurred in connection with legal and other proceedings arising from relationships or transactions with us. These relationships or transactions include those arising from service as a director or officer of the Company, underwriting agreements relating to our securities, acquisition agreements and various other business transactions or arrangements. Because the extent of our obligations under these agreements depends entirely upon the occurrence of future events, we are unable to determine our potential future liability under these agreements. We do, however, record a liability for residential mortgage loans that we expect to repurchase pursuant to various representations and warranties. See Note 9 (Mortgage Banking Activities) for additional information on the liability for mortgage loan repurchase losses.

WRITTEN PUT OPTIONS Written put options are contracts that give the counterparty the right to sell to us an underlying instrument held by the counterparty at a specified price and may include options, floors, caps and credit default swaps. These written put option contracts generally permit net settlement. While these derivative transactions expose us to risk if the option is exercised, we manage this risk by entering into offsetting trades or by taking short positions in the underlying instrument. We offset market risk related to put options written to customers with cash securities or other offsetting derivative transactions. Additionally, for certain of these contracts, we require the counterparty to pledge the underlying instrument as collateral for the transaction. Our ultimate obligation under written put options is based on future market conditions and is only quantifiable at settlement. See Note 16 (Derivatives) for additional information regarding written derivative contracts.

LOANS AND MHFS SOLD WITH RECOURSE In certain loan sales or securitizations, we provide recourse to the buyer whereby we are required to indemnify the buyer for any loss on the loan up to par value plus accrued interest. We provide recourse, predominantly to GSEs, on loans sold under various programs and arrangements. Substantially all of these programs and arrangements require that we share in the loans' credit exposure for their remaining life by providing recourse to the GSE, up to 33.33% of actual losses incurred on a pro-rata basis in the event of borrower default. Under the remaining recourse programs and arrangements, if certain events occur within a specified period of time from transfer date, we have to provide limited recourse to the buyer to indemnify them for losses incurred for the remaining life of the loans. The maximum exposure to loss reported in Table 14.1 represents the outstanding principal balance of the loans sold or securitized that are subject to recourse provisions or the maximum losses per the contractual agreements. However, we believe the likelihood of loss of the entire balance due to these recourse agreements is remote, and amounts paid can be recovered in whole or in part from the sale of collateral. We also provide representation and warranty guarantees on loans sold under the various recourse programs and arrangements. Our loss exposure relative to these guarantees is separately considered and provided for, as necessary, in determination of our liability for loan repurchases due to breaches of representation and warranties. See Note 9 (Mortgage Banking Activities) for additional information on the liability for mortgage loan repurchase losses.

FACTORING GUARANTEES Under certain factoring arrangements, we are required to purchase trade receivables from third parties, generally upon their request, if receivable debtors default on their payment obligations.

OTHER GUARANTEES We are members of exchanges and clearing houses that we use to clear our trades and those of our customers. It is common that all members in these organizations are required to collectively guarantee the performance of other members. Our obligations under the guarantees are based on either a fixed amount or a multiple of the collateral we are required to maintain with these organizations. We have not recorded a liability for these arrangements as of the dates presented in Table 14.1 because we believe the likelihood of loss is remote.

We also have contingent performance arrangements related to various customer relationships and lease transactions. We are required to pay the counterparties to these agreements if third parties default on certain obligations.

Pledged Assets

As part of our liquidity management strategy, we pledge various assets to secure trust and public deposits, borrowings and letters of credit from the FHLB and FRB, securities sold under agreements to repurchase (repurchase agreements), securities lending arrangements, and for other purposes as required or permitted by law or insurance statutory requirements. The types of collateral we pledge include securities issued by federal agencies, GSEs, domestic and foreign companies and various commercial and consumer loans. Table 14.2 provides the total carrying amount of pledged assets by asset type and pledged off-balance sheet securities for securities financings. The table excludes pledged consolidated VIE assets of $13.6 billion and $13.4 billion at December 31, 2017 and 2016, respectively, which can only be used to settle the liabilities of those entities. The table also excludes $675 million and $1.1 billion in assets pledged in transactions with VIE's accounted for as secured borrowings at December 31, 2017 and 2016, respectively. See Note 8 (Securitizations and Variable Interest Entities) for additional information on consolidated VIE assets and secured borrowings.

Table 14.2: Pledged Assets

(in millions)		Dec 31, 2017	Dec 31, 2016
Trading assets and other (1)	$	**109,279**	84,603
Investment securities (2)		**73,467**	90,946
Mortgages held for sale and loans (3)		**469,554**	516,112
Total pledged assets	$	**652,300**	691,661

(1) Consists of trading assets of $42.0 billion and $33.2 billion at December 31, 2017 and 2016, respectively and off-balance sheet securities of $67.3 billion and $51.4 billion as of the same dates, respectively, that are pledged as collateral for repurchase agreements and other securities financings. Total trading assets and other includes $109.1 billion and $84.2 billion at December 31, 2017 and 2016, respectively, that permit the secured parties to sell or repledge the collateral.

(2) Includes carrying value of $5.0 billion and $6.2 billion (fair value of $5.0 billion and $6.2 billion) in collateral for repurchase agreements at December 31, 2017 and 2016, respectively, which are pledged under agreements that do not permit the secured parties to sell or repledge the collateral. Also includes $64 million and $617 million in collateral pledged under repurchase agreements at December 31, 2017 and 2016, respectively, that permit the secured parties to sell or repledge the collateral. All other pledged securities are pursuant to agreements that do not permit the secured party to sell or repledge the collateral.

(3) Includes mortgages held for sale of $2.6 billion and $15.8 billion at December 31, 2017 and 2016, respectively. Substantially all of the total mortgages held for sale and loans are pledged under agreements that do not permit the secured parties to sell or repledge the collateral. Amounts exclude $2.2 billion and $1.2 billion at December 31, 2017 and 2016, respectively, of pledged loans recorded on our balance sheet representing certain delinquent loans that are eligible for repurchase from GNMA loan securitizations.

Securities Financing Activities

We enter into resale and repurchase agreements and securities borrowing and lending agreements (collectively, "securities financing activities") typically to finance trading positions (including securities and derivatives), acquire securities to cover short trading positions, accommodate customers' financing needs, and settle other securities obligations. These activities are conducted through our broker-dealer subsidiaries and to a lesser extent through other bank entities. Most of our securities financing activities involve high quality, liquid securities such as U.S. Treasury securities and government agency securities, and to a lesser extent, less liquid securities, including equity securities, corporate bonds and asset-backed securities. We account for these transactions as collateralized financings in which we typically receive or pledge securities as collateral. We believe these financing transactions generally do not have material credit risk given the collateral provided and the related monitoring processes.

OFFSETTING OF RESALE AND REPURCHASE AGREEMENTS AND SECURITIES BORROWING AND LENDING AGREEMENTS Table 14.3 presents resale and repurchase agreements subject to master repurchase agreements (MRA) and securities borrowing and lending agreements subject to master securities lending agreements (MSLA). We account for transactions subject to these agreements as collateralized financings, and those with a single counterparty are presented net on our balance sheet, provided certain criteria are met that permit balance sheet netting. Most transactions subject to these agreements do not meet those criteria and thus are not eligible for balance sheet netting.

Collateral we pledged consists of non-cash instruments, such as securities or loans, and is not netted on the balance sheet against the related liability. Collateral we received includes securities or loans and is not recognized on our balance sheet. Collateral pledged or received may be increased or decreased over time to maintain certain contractual thresholds, as the assets underlying each arrangement fluctuate in value. Generally, these agreements require collateral to exceed the asset or liability recognized on the balance sheet. The following table includes the amount of collateral pledged or received related to exposures subject to enforceable MRAs or MSLAs. While these agreements are typically over-collateralized, U.S. GAAP requires disclosure in this table to limit the reported amount of such collateral to the amount of the related recognized asset or liability for each counterparty.

In addition to the amounts included in Table 14.3, we also have balance sheet netting related to derivatives that is disclosed in Note 16 (Derivatives).

Table 14.3: Offsetting – Resale and Repurchase Agreements

(in millions)		Dec 31, 2017	Dec 31, 2016
Assets:			
Resale and securities borrowing agreements			
Gross amounts recognized	$	**121,135**	91,123
Gross amounts offset in consolidated balance sheet (1)		**(23,188)**	(11,680)
Net amounts in consolidated balance sheet (2)		**97,947**	79,443
Collateral not recognized in consolidated balance sheet (3)		**(96,829)**	(78,837)
Net amount (4)	$	**1,118**	606
Liabilities:			
Repurchase and securities lending agreements			
Gross amounts recognized (5)	$	**111,488**	89,111
Gross amounts offset in consolidated balance sheet (1)		**(23,188)**	(11,680)
Net amounts in consolidated balance sheet (6)		**88,300**	77,431
Collateral pledged but not netted in consolidated balance sheet (7)		**(87,918)**	(77,184)
Net amount (8)	$	**382**	247

(1) Represents recognized amount of resale and repurchase agreements with counterparties subject to enforceable MRAs that have been offset in the consolidated balance sheet.
(2) At December 31, 2017 and 2016, includes $78.9 billion and $58.1 billion, respectively, classified on our consolidated balance sheet in federal funds sold, securities purchased under resale agreements and other short-term investments and $19.0 billion and $21.3 billion, respectively, in loans.
(3) Represents the fair value of collateral we have received under enforceable MRAs or MSLAs, limited for table presentation purposes to the amount of the recognized asset due from each counterparty. At December 31, 2017 and 2016, we have received total collateral with a fair value of $130.8 billion and $102.3 billion, respectively, all of which we have the right to sell or repledge. These amounts include securities we have sold or repledged to others with a fair value of $66.3 billion at December 31, 2017, and $50.0 billion at December 31, 2016.
(4) Represents the amount of our exposure that is not collateralized and/or is not subject to an enforceable MRA or MSLA.
(5) For additional information on underlying collateral and contractual maturities, see the "Repurchase and Securities Lending Agreements" section in this Note.
(6) Amount is classified in short-term borrowings on our consolidated balance sheet.
(7) Represents the fair value of collateral we have pledged, related to enforceable MRAs or MSLAs, limited for table presentation purposes to the amount of the recognized liability owed to each counterparty. At December 31, 2017 and 2016, we have pledged total collateral with a fair value of $113.6 billion and $91.4 billion, respectively, of which the counterparty does not have the right to sell or repledge $5.2 billion as of December 31, 2017, and $6.6 billion as of December 31, 2016.
(8) Represents the amount of our obligation that is not covered by pledged collateral and/or is not subject to an enforceable MRA or MSLA.

REPURCHASE AND SECURITIES LENDING AGREEMENTS Securities sold under repurchase agreements and securities lending arrangements are effectively short-term collateralized borrowings. In these transactions, we receive cash in exchange for transferring securities as collateral and recognize an obligation to reacquire the securities for cash at the transaction's maturity. These types of transactions create risks, including (1) the counterparty may fail to return the securities at maturity, (2) the fair value of the securities transferred may decline below the amount of our obligation to reacquire the securities, and therefore create an obligation for us to pledge additional amounts, and (3) the counterparty may accelerate the maturity on demand, requiring us to reacquire the security prior to contractual maturity. We attempt to mitigate these risks by the fact that most of our securities financing activities involve highly liquid securities, we underwrite and monitor the financial strength of our counterparties, we monitor the fair value of collateral pledged relative to contractually required repurchase amounts, and we monitor that our collateral is properly returned through the clearing and settlement process in advance of our cash repayment. Table 14.4 provides the underlying collateral types of our gross obligations under repurchase and securities lending agreements.

Table 14.4: Underlying Collateral Types of Gross Obligations

(in millions)		Dec 31, 2017		Dec 31, 2016
Repurchase agreements:				
Securities of U.S. Treasury and federal agencies	$	**51,144**		34,335
Securities of U.S. States and political subdivisions		**92**		81
Federal agency mortgage-backed securities		**35,386**		32,669
Non-agency mortgage-backed securities		**1,324**		2,167
Corporate debt securities		**7,152**		6,829
Asset-backed securities		**2,034**		3,010
Equity securities		**838**		1,309
Other		**1,783**		1,704
Total repurchases		**99,753**		82,104
Securities lending:				
Securities of U.S. Treasury and federal agencies		**186**		152
Federal agency mortgage-backed securities		**—**		104
Non-agency mortgage-backed securities		**—**		1
Corporate debt securities		**619**		653
Equity securities (1)		**10,930**		6,097
Total securities lending		**11,735**		7,007
Total repurchases and securities lending	$	**111,488**	$	89,111

(1) Equity securities are generally exchange traded and either re-hypothecated under margin lending agreements or obtained through contemporaneous securities borrowing transactions with other counterparties.

Table 14.5 provides the contractual maturities of our gross obligations under repurchase and securities lending agreements.

Table 14.5: Contractual Maturities of Gross Obligations

(in millions)		Overnight/ continuous	Up to 30 days	30-90 days	>90 days	Total gross obligation
December 31, 2017						
Repurchase agreements	$	**83,780**	**7,922**	**3,286**	**4,765**	**99,753**
Securities lending		**9,634**	**584**	**1,363**	**154**	**11,735**
Total repurchases and securities lending (1)	$	**93,414**	**8,506**	**4,649**	**4,919**	**111,488**
December 31, 2016						
Repurchase agreements	$	60,516	9,598	6,762	5,228	82,104
Securities lending		5,565	167	1,275	—	7,007
Total repurchases and securities lending (1)	$	66,081	9,765	8,037	5,228	89,111

(1) Securities lending is executed under agreements that allow either party to terminate the transaction without notice, while repurchase agreements have a term structure to them that technically matures at a point in time. The overnight/continuous repurchase agreements require election of both parties to roll the trade rather than the election to terminate the arrangement as in securities lending.

OTHER COMMITMENTS To meet the financing needs of our customers, we may enter into commitments to purchase debt and equity securities to provide capital for their funding, liquidity or other future needs. As of December 31, 2017 and 2016, we had commitments to purchase debt securities of $194 million and $638 million, and commitments to purchase equity securities of $2.2 billion and $2.0 billion, respectively.

Note 15: Legal Actions

Wells Fargo and certain of our subsidiaries are involved in a number of judicial, regulatory, arbitration, and other proceedings concerning matters arising from the conduct of our business activities, and many of those proceedings expose Wells Fargo to potential financial loss. These proceedings include actions brought against Wells Fargo and/or our subsidiaries with respect to corporate-related matters and transactions in which Wells Fargo and/or our subsidiaries were involved. In addition, Wells Fargo and our subsidiaries may be requested to provide information or otherwise cooperate with government authorities in the conduct of investigations of other persons or industry groups.

Although there can be no assurance as to the ultimate outcome, Wells Fargo and/or our subsidiaries have generally denied, or believe we have a meritorious defense and will deny, liability in all significant legal actions pending against us, including the matters described below, and we intend to defend vigorously each case, other than matters we describe as having settled. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

ATM ACCESS FEE LITIGATION In October 2011, plaintiffs filed a putative class action, *Mackmin, et al. v. Visa, Inc. et al.*, against Wells Fargo & Company, Wells Fargo Bank, N.A., Visa, MasterCard, and several other banks in the United States District Court for the District of Columbia. Plaintiffs allege that the Visa and MasterCard requirement that if an ATM operator charges an access fee on Visa and MasterCard transactions, then that fee cannot be greater than the access fee charged for transactions on other networks violates antitrust rules. Plaintiffs seek treble damages, restitution, injunctive relief, and attorneys' fees where available under federal and state law. Two other antitrust cases which make similar allegations were filed in the same court, but these cases did not name Wells Fargo as a defendant. On February 13, 2013, the district court granted defendants' motions to dismiss the three actions. Plaintiffs appealed the dismissals and, on August 4, 2015, the United States Court of Appeals for the District of Columbia Circuit vacated the district court's decisions and remanded the three cases to the district court for further proceedings. On June 28, 2016, the United States Supreme Court granted defendants' petitions for writ of certiorari to review the decisions of the United States Court of Appeals for the District of Columbia. On November 17, 2016, the United States Supreme Court dismissed the petitions as improvidently granted, and the three cases returned to the district court for further proceedings.

AUTOMOBILE LENDING MATTERS As the Company centralizes operations in its automobile lending business and tightens controls and oversight of third-party risk management, the Company anticipates it may continue to identify and remediate issues related to historical practices concerning the origination, servicing, and/or collection of consumer automobile loans, including related insurance products. For example, in July 2017, the Company announced a plan to remediate customers who may have been financially harmed due to issues related to automobile collateral protection insurance (CPI) policies purchased through a third-party vendor on their behalf. The Company determined that certain external vendor processes and operational controls were inadequate and, as a result, customers may have been charged premiums for CPI even if they were paying for their own vehicle insurance, as required, and in some cases the CPI premiums may have contributed to a default that led to their vehicle's repossession. The Company discontinued the practice of placing CPI in September 2016. Multiple putative class action cases alleging, among other things, unfair and deceptive practices relating to these CPI policies, have been filed against the Company and consolidated into one multi-district litigation in the United States District Court for the Central District of California. Further, a former team member has alleged retaliation for raising concerns regarding automobile lending practices. In addition, the Company has identified certain issues related to the unused portion of guaranteed automobile protection (GAP) waiver or insurance agreements between the dealer and, by assignment, the lender, which may result in refunds to customers in certain states. Allegations related to both the CPI and GAP programs are among the subjects of two shareholder derivative lawsuits, which were consolidated into one lawsuit in California state court. These and other issues related to the origination, servicing and/or collection of consumer automobile loans, including related insurance products, have also subjected the Company to formal or informal inquiries, investigations or examinations from federal and state government agencies.

CONSUMER DEPOSIT ACCOUNT RELATED REGULATORY INVESTIGATION The Consumer Financial Protection Bureau (the "CFPB") is conducting an investigation into whether customers were unduly harmed by the Company's procedures regarding the freezing (and, in many cases, closing) of consumer deposit accounts after the Company detected suspected fraudulent activity (by third-parties or account holders) that affected those accounts.

INADVERTENT CLIENT INFORMATION DISCLOSURE In July 2017, the Company inadvertently provided certain client information in response to a third-party subpoena issued in a civil litigation. The Company obtained permanent injunctions in New Jersey and New York state courts requiring the electronic data that contained the client information and all copies to be delivered to the New Jersey state court and the Company for safekeeping. The court has now returned the data to counsel for the Company. The Company has made voluntary self-disclosures to various state and federal regulatory agencies. Notifications have been sent to clients whose personal identifying data was contained in the inadvertent production.

INTERCHANGE LITIGATION Plaintiffs representing a putative class of merchants have filed putative class actions, and individual merchants have filed individual actions, against Wells Fargo Bank, N.A., Wells Fargo & Company, Wachovia Bank, N.A. and Wachovia Corporation regarding the interchange fees associated with Visa and MasterCard payment card transactions. Visa, MasterCard and several other banks and bank holding companies are also named as defendants in these actions. These actions have been consolidated in the United States District Court for the Eastern District of New York. The amended and consolidated complaint asserts claims against defendants based on alleged violations of federal and state antitrust laws and seeks damages, as well as injunctive relief. Plaintiff merchants allege that Visa, MasterCard and payment card issuing banks unlawfully colluded to set interchange rates. Plaintiffs also allege that enforcement of certain Visa and MasterCard rules and alleged tying and bundling of services offered to merchants are anticompetitive. Wells Fargo and Wachovia, along with other defendants and entities, are parties to Loss and Judgment Sharing Agreements, which provide that they, along with other entities, will share, based on a formula, in any losses from the Interchange Litigation. On July 13, 2012, Visa, MasterCard and the financial institution defendants, including Wells Fargo, signed a memorandum of understanding with plaintiff merchants to resolve the consolidated class action and reached a separate settlement in principle of the consolidated individual actions. The settlement payments to be made by all defendants in the consolidated class and individual actions totaled approximately $6.6 billion before reductions applicable to certain merchants opting out of the settlement. The class settlement also provided for the distribution to class merchants of 10 basis points of default interchange across all credit rate categories for a period of eight consecutive months. The district court granted final approval of the settlement, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. Other merchants opted out of the settlement and are pursuing several individual actions. On June 30, 2016, the Second Circuit vacated the settlement agreement and reversed and remanded the consolidated action to the United States District Court for the Eastern District of New York for further proceedings. On November 23, 2016, prior class counsel filed a petition to the United States Supreme Court, seeking review of the reversal of the settlement by the Second Circuit, and the Supreme Court denied the petition on March 27, 2017. On November 30, 2016, the district court appointed lead class counsel for a damages class and an equitable relief class. Several of the opt-out litigations were settled during the pendency of the Second Circuit appeal while others remain pending. Discovery is proceeding in the opt-out litigations and the remanded class cases.

MORTGAGE BANKRUPTCY LOAN MODIFICATION LITIGATION Plaintiffs, representing a putative class of mortgage borrowers who were debtors in Chapter 13 bankruptcy cases, filed a putative class action, *Cotton, et al. v. Wells Fargo, et al.*, against Wells Fargo & Company and Wells Fargo Bank, N.A. in the United States Bankruptcy Court for the Western District of North Carolina on June 7, 2017. Plaintiffs allege that Wells Fargo improperly and unilaterally modified the mortgages of borrowers who were debtors in Chapter 13 bankruptcy cases. Plaintiffs allege that Wells Fargo implemented these modifications by improperly filing mortgage payment change notices in Chapter 13 bankruptcy cases, in violation of bankruptcy rules and process. The amended complaint asserts claims based on, among other things, alleged fraud, violations of bankruptcy rules and laws, and unfair and deceptive trade practices. The amended complaint seeks monetary damages, attorneys' fees, and declaratory and injunctive relief.

MORTGAGE INTEREST RATE LOCK RELATED REGULATORY INVESTIGATION The CFPB is conducting an investigation into the Company's policies and procedures regarding the circumstances in which the Company required customers to pay fees for the extension of interest rate lock periods for residential mortgages. This matter has also subjected the Company to formal or informal inquiries, investigations or examinations from other federal and state government agencies. On October 4, 2017, the Company announced plans to reach out to all home lending customers who paid fees for mortgage rate lock extensions requested from September 16, 2013, through February 28, 2017, and to provide refunds, with interest, to customers who believe they should not have paid those fees. The Company is named in a putative class action, filed in the United States District Court for the Northern District of California, alleging violations of federal and state consumer fraud statutes relating to mortgage rate lock extension fees. A second suit was also filed, but was voluntarily dismissed in November 2017. In addition, former team members have asserted claims, including in pending litigation, that they were terminated for raising concerns regarding these policies and procedures. Allegations related to mortgage interest rate lock extension fees are also among the subjects of two shareholder derivative lawsuits filed in California state court.

MORTGAGE RELATED REGULATORY INVESTIGATIONS Federal and state government agencies, including the United States Department of Justice (the "Department of Justice"), continue investigations or examinations of certain mortgage related activities of Wells Fargo and predecessor institutions. Wells Fargo, for itself and for predecessor institutions, has responded, and continues to respond, to requests from these agencies seeking information regarding the origination, underwriting and securitization of residential mortgages, including sub-prime mortgages. These agencies have advanced theories of purported liability with respect to certain of these activities. The Department of Justice and Wells Fargo continue to discuss the matter, including potential settlement of the Department of Justice's concerns; however, litigation with these agencies, including with the Department of Justice, remains a possibility. Other financial institutions have entered into similar settlements with these agencies, the nature of which related to the specific activities of those financial institutions, including the imposition of significant financial penalties and remedial actions.

OFAC RELATED INVESTIGATION The Company has self-identified an issue whereby certain foreign banks utilized a Wells Fargo software-based solution to conduct import/export trade-related financing transactions with countries and entities prohibited by the Office of Foreign Assets Control ("OFAC") of the United States Department of the Treasury. We do not believe any funds related to these transactions flowed through accounts at Wells Fargo as a result of the aforementioned conduct. The Company has made voluntary self-disclosures to OFAC and is cooperating with an inquiry from the Department of Justice.

ORDER OF POSTING LITIGATION Plaintiffs filed a series of putative class actions against Wachovia Bank, N.A. and Wells Fargo Bank, N.A., as well as many other banks, challenging the "high to low" order in which the banks post debit card transactions to consumer deposit accounts. Most of these actions were consolidated in multi-district litigation proceedings (the "MDL proceedings") in the United States District Court for the Southern District of Florida. The court in the MDL proceedings has certified a class of putative plaintiffs, and Wells Fargo moved to compel arbitration of the claims of unnamed class members. The court denied the motions to compel arbitration on October 17, 2016. Wells Fargo has appealed this decision to the United States Court of Appeals for the Eleventh Circuit.

RMBS TRUSTEE LITIGATION In November 2014, a group of institutional investors (the "Institutional Investor Plaintiffs"), including funds affiliated with BlackRock, Inc., filed a putative class action in the United States District Court for the Southern District of New York against Wells Fargo Bank, N.A., alleging claims against the Company in its capacity as trustee for a number of residential mortgage-backed securities (RMBS) trusts (the "Federal Court Complaint"). Similar complaints have been filed against other trustees in various courts, including in the Southern District of New York, in New York state court, and in other states, by RMBS investors. The Federal Court Complaint alleges that Wells Fargo Bank, N.A., as trustee, caused losses to investors and asserts causes of action based upon, among other things, the trustee's alleged failure to notify and enforce repurchase obligations of mortgage loan sellers for purported breaches of representations and warranties, notify investors of alleged events of default, and abide by appropriate standards of care following alleged events of default. Plaintiffs seek money damages in an unspecified amount, reimbursement of expenses, and equitable relief. In December 2014 and December 2015, certain other investors filed four complaints alleging similar claims against Wells Fargo Bank, N.A. in the Southern District of New York (the "Related Federal Cases"), and the various cases pending against Wells Fargo are proceeding before the same judge. On January 19, 2016, the Southern District of New York entered an order in connection with the Federal Court Complaint dismissing claims related to certain of the trusts at issue (the "Dismissed Trusts"). The Company's motion to dismiss the Federal Court Complaint and the complaints for the Related Federal Cases was granted in part and denied in part in March 2017. In May 2017, the Company filed third-party complaints against certain investment advisors affiliated with the Institutional Investor Plaintiffs seeking contribution with respect to claims alleged in the Federal Court Complaint. The investment advisors have moved to dismiss those complaints.

A complaint raising similar allegations to the Federal Court Complaint was filed in May 2016 in New York state court by a different plaintiff investor. In addition, the Institutional Investor Plaintiffs subsequently filed a complaint relating to the Dismissed Trusts and certain additional trusts in California state court (the "California Action"). The California Action was subsequently dismissed in September 2016. In December 2016, the Institutional Investor Plaintiffs filed a new putative class action complaint in New York state court in respect of 261 RMBS trusts, including the Dismissed Trusts, for which Wells Fargo Bank, N.A. serves or served as trustee (the "State Court Action"). The Company has moved to dismiss the State Court Action.

In July 2017, certain of the plaintiffs from the State Court Action filed a civil complaint relating to Wells Fargo Bank, N.A.'s setting aside reserves for legal fees and expenses in connection with the liquidation of eleven RMBS trusts at issue in the State Court Action. The complaint seeks, among other relief, declarations that Wells Fargo Bank, N.A. is not entitled to indemnification, the advancement of funds or the taking of reserves from trust funds for legal fees and expenses it incurs in defending the claims in the State Court Action. In November 2017, the Company's motion to dismiss the complaint was granted. Plaintiffs filed a notice of appeal in January 2018. In September 2017, one of the plaintiffs in the Related Federal Cases filed a similar complaint in the Southern District of New York seeking declaratory and injunctive relief and money damages on an individual and class action basis.

SALES PRACTICES MATTERS Federal, state and local government agencies, including the Department of Justice, the United States Securities and Exchange Commission and the United States Department of Labor, and state attorneys general and prosecutors' offices, as well as Congressional committees, have undertaken formal or informal inquiries, investigations or examinations arising out of certain sales practices of the Company that were the subject of settlements with the Consumer Financial Protection Bureau, the Office of the Comptroller of the Currency and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016. These matters are at varying stages. The Company has responded, and continues to respond, to requests from a number of the foregoing and has discussed the resolution of some of the matters.

In addition, a number of lawsuits have also been filed by non-governmental parties seeking damages or other remedies related to these sales practices. First, various class plaintiffs purporting to represent consumers who allege that they received products or services without their authorization or consent have brought separate putative class actions against the Company in the United States District Court for the Northern District of California and various other jurisdictions. In April 2017, the Company entered into a settlement agreement in the first-filed action, *Jabbari v. Wells Fargo Bank, N.A.*, to resolve claims regarding certain products or services provided without authorization or consent for the time period May 1, 2002 to April 20, 2017. Pursuant to the settlement, the Company will pay $142 million for remediation, attorneys' fees, and settlement fund claims administration. In the unlikely event that the $142 million settlement total is not enough to provide remediation, pay attorneys' fees, pay settlement fund claims administration costs, and have at least $25 million left over to distribute to all class members, the Company will contribute additional funds to the settlement. In addition, in the unlikely event that the number of unauthorized accounts identified by settlement class members in the claims process and not disputed by the claims administrator exceeds plaintiffs' 3.5 million account estimate, the Company will proportionately increase the $25 million reserve so that the ratio of reserve to unauthorized accounts is no less than what was implied by plaintiffs' estimate at the time of the district court's preliminary approval of the settlement in July 2017. A final approval hearing has been scheduled for March 2018, although this timing is subject to change. Second, Wells Fargo shareholders are pursuing a consolidated securities fraud class action in the United States District Court for the Northern District of California alleging certain misstatements and omissions in the Company's disclosures related to sales practices matters. Third, Wells Fargo shareholders have brought numerous shareholder derivative lawsuits asserting breach of fiduciary duty claims, among others, against current and former directors and officers for their alleged failure to detect and prevent sales practices issues, which were consolidated into two separate actions in the United States District Court for the Northern District of California and California state court, as well as two separate actions in Delaware state court. Fourth, a range of employment litigation has been brought against Wells Fargo, including an Employee Retirement Income Security Act (ERISA) class action in the United States District Court for the District of Minnesota on behalf of 401(k) plan participants; class actions pending in the United States District Courts for the Northern District of California and Eastern District of New York on behalf of team members who allege that they protested sales practice misconduct and/or were terminated for not meeting sales goals; various wage and hour class actions brought in federal and state court in California, New Jersey, Florida, and Pennsylvania on behalf of non-exempt branch based team members alleging sales pressure resulted in uncompensated overtime; and multiple single plaintiff Sarbanes-Oxley Act complaints and state law whistleblower actions filed with the United States Department of Labor or in various state courts alleging adverse employment actions for raising sales practice misconduct issues.

SEMINOLE TRIBE TRUSTEE LITIGATION The Seminole Tribe of Florida filed a complaint in Florida state court alleging that Wells Fargo, as trustee, charged excess fees in connection with the administration of a minor's trust and failed to invest the assets of the trust prudently. The complaint was later amended to include three individual current and former beneficiaries as plaintiffs and to remove the Tribe as a party to the case. In December 2016, the Company filed a motion to dismiss the amended complaint on the grounds that the Tribe is a necessary party and that the individual beneficiaries lack standing to bring claims.

OUTLOOK As described above, the Company establishes accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. The high end of the range of reasonably possible potential losses in excess of the Company's accrual for probable and estimable losses was approximately $2.7 billion as of December 31, 2017. The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss. Wells Fargo is unable to determine whether the ultimate resolution of either the mortgage related regulatory investigations or the sales practices matters will have a material adverse effect on its consolidated financial condition. Based on information currently available, advice of counsel, available insurance coverage and established reserves, Wells Fargo believes that the eventual outcome of other actions against Wells Fargo and/or its subsidiaries will not, individually or in the aggregate, have a material adverse effect on Wells Fargo's consolidated financial condition. However, it is possible that the ultimate resolution of a matter, if unfavorable, may be material to Wells Fargo's results of operations for any particular period.

Note 16: Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. We designate certain derivatives as hedging instruments in a qualifying hedge accounting relationship (fair value or cash flow hedge). Our remaining derivatives consist of economic hedges that do not qualify for hedge accounting and derivatives held for customer accommodation trading or other purposes.

Our asset/liability management approach to interest rate, foreign currency and certain other risks includes the use of derivatives. Such derivatives are typically designated as fair value or cash flow hedges, or economic hedges. We use derivatives to help minimize significant, unplanned fluctuations in earnings, fair values of assets and liabilities, and cash flows caused by interest rate, foreign currency and other market risk volatility. This approach involves modifying the repricing characteristics of certain assets and liabilities so that changes in interest rates, foreign currency and other exposures, which may cause the hedged assets and liabilities to gain or lose fair value, do not have a significantly adverse effect on the net interest margin, cash flows and earnings. In a fair value or economic hedge, the effect of change in fair value will generally be offset by the unrealized gain or loss on the derivatives linked to the hedged assets and liabilities. In a cash flow hedge, where we manage the variability of cash payments due to interest rate fluctuations by the effective use of derivatives linked to hedged assets and liabilities, the hedged asset or liability is not adjusted and the unrealized gain or loss on the derivative is recorded in other comprehensive income.

We also offer various derivatives, including interest rate, commodity, equity, credit and foreign exchange contracts, as an accommodation to our customers as part of our trading businesses. These derivative transactions, which involve our engaging in market-making activities or acting as an intermediary, are conducted in an effort to help customers manage their market risks. We usually offset our exposure from such derivatives by entering into other financial contracts, such as separate derivative or security transactions. These customer accommodations and any offsetting derivatives are treated as customer accommodation trading and other derivatives in our disclosures. Additionally, embedded derivatives that are required to be accounted for separately from their host contracts are included in the customer accommodation trading and other derivatives disclosures as applicable.

Table 16.1 presents the total notional or contractual amounts and fair values for our derivatives. Derivative transactions can be measured in terms of the notional amount, but this amount is not recorded on the balance sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. The notional amount is generally not exchanged, but is used only as the basis on which interest and other payments are determined.

Table 16.1: Notional or Contractual Amounts and Fair Values of Derivatives

	December 31, 2017			December 31, 2016		
	Notional or	Fair value		Notional or	Fair value	
(in millions)	contractual amount	Asset derivatives	Liability derivatives	contractual amount	Asset derivatives	Liability derivatives
Derivatives designated as hedging instruments						
Interest rate contracts (1)	**$ 209,677**	**2,492**	**1,092**	235,222	6,587	2,710
Foreign exchange contracts (1)	**34,135**	**1,482**	**1,137**	25,861	673	2,779
Total derivatives designated as qualifying hedging instruments		**3,974**	**2,229**		7,260	5,489
Derivatives not designated as hedging instruments						
Economic hedges:						
Interest rate contracts (2)	**220,558**	**159**	**201**	228,051	1,098	1,441
Equity contracts	**12,315**	**716**	**138**	7,964	545	83
Foreign exchange contracts	**15,976**	**78**	**309**	20,435	626	165
Credit contracts - protection purchased	**111**	**37**	**—**	482	102	—
Subtotal		**990**	**648**		2,371	1,689
Customer accommodation trading and other derivatives:						
Interest rate contracts	**6,434,673**	**14,979**	**14,179**	6,018,370	57,583	61,058
Commodity contracts	**62,530**	**2,354**	**1,335**	65,532	3,057	2,551
Equity contracts	**213,750**	**6,291**	**8,363**	151,675	4,813	6,029
Foreign exchange contracts	**362,896**	**7,413**	**7,122**	318,999	9,595	9,798
Credit contracts - protection sold	**9,021**	**147**	**214**	10,483	85	389
Credit contracts - protection purchased	**17,406**	**207**	**208**	19,964	365	138
Other contracts	**—**	**—**	**—**	961	—	47
Subtotal		**31,391**	**31,421**		75,498	80,010
Total derivatives not designated as hedging instruments		**32,381**	**32,069**		77,869	81,699
Total derivatives before netting		**36,355**	**34,298**		85,129	87,188
Netting (3)		**(24,127)**	**(25,502)**		(70,631)	(72,696)
Total		**$ 12,228**	**8,796**		14,498	14,492

(1) Notional amounts presented exclude $500 million and $1.9 billion of interest rate contracts at December 31, 2017 and 2016, respectively, for certain derivatives that are combined for designation as a hedge on a single instrument. The notional amount for foreign exchange contracts at December 31, 2017 and 2016, excludes $13.5 billion and $9.6 billion, respectively for certain derivatives that are combined for designation as a hedge on a single instrument.
(2) Includes economic hedge derivatives used to hedge the risk of changes in the fair value of residential MSRs, MHFS, loans, derivative loan commitments and other interests held.
(3) Represents balance sheet netting of derivative asset and liability balances, related cash collateral and portfolio level counterparty valuation adjustments. See the next table in this Note for further information.

Table 16.2 provides information on the gross fair values of derivative assets and liabilities, the balance sheet netting adjustments and the resulting net fair value amount recorded on our balance sheet, as well as the non-cash collateral associated with such arrangements. We execute substantially all of our derivative transactions under master netting arrangements and reflect all derivative balances and related cash collateral subject to enforceable master netting arrangements on a net basis within the balance sheet. The "Gross amounts recognized" column in the following table includes $30.0 billion and $29.9 billion of gross derivative assets and liabilities, respectively, at December 31, 2017, and $74.4 billion and $78.4 billion, respectively, at December 31, 2016, with counterparties subject to enforceable master netting arrangements that are carried on the balance sheet net of offsetting amounts. The remaining gross derivative assets and liabilities of $6.4 billion and $4.4 billion, respectively, at December 31, 2017 and $10.7 billion and $8.7 billion, respectively, at December 31, 2016, include those with counterparties subject to master netting arrangements for which we have not assessed the enforceability because they are with counterparties where we do not currently have positions to offset, those subject to master netting arrangements where we have not been able to confirm the enforceability and those not subject to master netting arrangements. As such, we do not net derivative balances or collateral within the balance sheet for these counterparties.

We determine the balance sheet netting adjustments based on the terms specified within each master netting arrangement. We disclose the balance sheet netting amounts within the column titled "Gross amounts offset in consolidated balance sheet." Balance sheet netting adjustments are determined at the counterparty level for which there may be multiple contract types. For disclosure purposes, we allocate these netting adjustments to the contract type for each counterparty proportionally based upon the "Gross amounts recognized" by counterparty. As a result, the net amounts disclosed by contract type may not represent the actual exposure upon settlement of the contracts.

We do not net non-cash collateral that we receive and pledge on the balance sheet. For disclosure purposes, we present the fair value of this non-cash collateral in the column titled "Gross amounts not offset in consolidated balance sheet (Disclosure-only netting)" within the table. We determine and allocate the Disclosure-only netting amounts in the same manner as balance sheet netting amounts.

The "Net amounts" column within Table 16.2 represents the aggregate of our net exposure to each counterparty after considering the balance sheet and Disclosure-only netting adjustments. We manage derivative exposure by monitoring the credit risk associated with each counterparty using counterparty specific credit risk limits, using master netting arrangements and obtaining collateral. Derivative contracts executed in over-the-counter markets include bilateral contractual arrangements that are not cleared through a central clearing organization but are typically subject to master netting arrangements. The percentage of our bilateral derivative transactions outstanding at period end in such markets, based on gross fair value, is provided within the following table. Other derivative contracts executed in over-the-counter or exchange-traded markets are settled through a central clearing organization and are excluded from this percentage. In addition to the netting amounts included in the table, we also have balance sheet netting related to resale and repurchase agreements that are disclosed within Note 14 (Guarantees, Pledged Assets and Collateral, and Other Commitments).

Table 16.2: Gross Fair Values of Derivative Assets and Liabilities

(in millions)		Gross amounts recognized (1)	Gross amounts offset in consolidated balance sheet (1)(2)	Net amounts in consolidated balance sheet	Gross amounts not offset in consolidated balance sheet (Disclosure-only netting) (3)	Net amounts	Percent exchanged in over-the-counter market (1)(4)
December 31, 2017							
Derivative assets							
Interest rate contracts	**$**	**17,630**	**(11,929)**	**5,701**	**(145)**	**5,556**	**99%**
Commodity contracts		**2,354**	**(966)**	**1,388**	**(4)**	**1,384**	**88**
Equity contracts		**7,007**	**(4,233)**	**2,774**	**(596)**	**2,178**	**76**
Foreign exchange contracts		**8,973**	**(6,656)**	**2,317**	**(25)**	**2,292**	**100**
Credit contracts-protection sold		**147**	**(145)**	**2**	**—**	**2**	**10**
Credit contracts-protection purchased		**244**	**(198)**	**46**	**(3)**	**43**	**89**
Total derivative assets	**$**	**36,355**	**(24,127)**	**12,228**	**(773)**	**11,455**	
Derivative liabilities							
Interest rate contracts	**$**	**15,472**	**(13,226)**	**2,246**	**(1,078)**	**1,168**	**99%**
Commodity contracts		**1,335**	**(648)**	**687**	**(1)**	**686**	**76**
Equity contracts		**8,501**	**(4,041)**	**4,460**	**(400)**	**4,060**	**85**
Foreign exchange contracts		**8,568**	**(7,189)**	**1,379**	**(204)**	**1,175**	**100**
Credit contracts-protection sold		**214**	**(204)**	**10**	**(9)**	**1**	**85**
Credit contracts-protection purchased		**208**	**(194)**	**14**	**—**	**14**	**9**
Other contracts		**—**	**—**	**—**	**—**	**—**	**—**
Total derivative liabilities	**$**	**34,298**	**(25,502)**	**8,796**	**(1,692)**	**7,104**	
December 31, 2016							
Derivative assets							
Interest rate contracts	$	65,268	(59,880)	5,388	(987)	4,401	34 %
Commodity contracts		3,057	(707)	2,350	(30)	2,320	74
Equity contracts		5,358	(3,018)	2,340	(365)	1,975	75
Foreign exchange contracts		10,894	(6,663)	4,231	(362)	3,869	97
Credit contracts-protection sold		85	(48)	37	—	37	61
Credit contracts-protection purchased		467	(315)	152	(1)	151	98
Total derivative assets	$	85,129	(70,631)	14,498	(1,745)	12,753	
Derivative liabilities							
Interest rate contracts	$	65,209	(58,956)	6,253	(3,129)	3,124	30 %
Commodity contracts		2,551	(402)	2,149	(37)	2,112	38
Equity contracts		6,112	(2,433)	3,679	(331)	3,348	85
Foreign exchange contracts		12,742	(10,572)	2,170	(251)	1,919	100
Credit contracts-protection sold		389	(295)	94	(44)	50	98
Credit contracts-protection purchased		138	(38)	100	(2)	98	50
Other contracts		47	—	47	—	47	100
Total derivative liabilities	$	87,188	(72,696)	14,492	(3,794)	10,698	

(1) In second quarter 2017, we adopted Settlement to Market treatment for the cash collateralizing our interest rate derivative contracts with certain centrally cleared counterparties. As a result of this adoption, the "gross amounts recognized" and "gross amounts offset in the consolidated balance sheet" columns do not include exposure with certain centrally cleared counterparties because the contracts are considered settled by the collateral. Likewise, what remains in these gross amount columns consists primarily of over-the-counter (OTC) market contracts for most of the contract types as reflected by the high percentage of OTC contracts in the "percent exchanged in over-the counter market" column as of December 31, 2017.

(2) Represents amounts with counterparties subject to enforceable master netting arrangements that have been offset in the consolidated balance sheet, including related cash collateral and portfolio level counterparty valuation adjustments. Counterparty valuation adjustments were $245 million and $348 million related to derivative assets and $95 million and $114 million related to derivative liabilities as of December 31, 2017 and 2016, respectively. Cash collateral totaled $2.7 billion and $4.2 billion, netted against derivative assets and liabilities, respectively, at December 31, 2017, and $4.8 billion and $7.1 billion, respectively, at December 31, 2016.

(3) Represents the fair value of non-cash collateral pledged and received against derivative assets and liabilities with the same counterparty that are subject to enforceable master netting arrangements. U.S. GAAP does not permit netting of such non-cash collateral balances in the consolidated balance sheet but requires disclosure of these amounts.

(4) Represents derivatives executed in over-the-counter markets not settled through a central clearing organization. Over-the-counter percentages are calculated based on Gross amounts recognized as of the respective balance sheet date. The remaining percentage represents derivatives settled through a central clearing organization, which are executed in either over-the-counter or exchange-traded markets.

Fair Value and Cash Flow Hedges

For fair value hedges, we use interest rate swaps to convert certain of our fixed-rate long-term debt and time certificates of deposit to floating rates to hedge our exposure to interest rate risk. We also enter into cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge our exposure to foreign currency risk and interest rate risk associated with the issuance of non-U.S. dollar denominated long-term debt. In addition, we use interest rate swaps, cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge against changes in fair value of certain investments in available-for-sale debt securities due to changes in interest rates, foreign currency rates, or both. We also use interest rate swaps to hedge against changes in fair value for certain mortgages held for sale.

For cash flow hedges, we use interest rate swaps to hedge the variability in interest payments received on certain floating-rate commercial loans and paid on certain floating-rate debt due to changes in the benchmark interest rate.

Based upon current interest rates, we estimate $90 million pre-tax of deferred net losses on derivatives in OCI at December 31, 2017, will be reclassified into net interest income during the next twelve months. Future changes to interest rates may significantly change actual amounts reclassified to earnings. We are hedging our exposure to the variability of future cash flows for all forecasted transactions for a maximum of 4 years.

Table 16.3 shows the net gains (losses) related to derivatives in fair value and cash flow hedging relationships.

Table 16.3: Gains (Losses) Recognized in Consolidated Statement of Income on Fair Value and Cash Flow Hedging Relationships (1)

	Net interest income					Noninterest Income	
(in millions)	Investment securities	Loans	Mortgages held for sale	Deposits	Long-term debt	Other	Total
Year ended December 31, 2017							
Total amounts presented in the consolidated statement of income	10,664	41,388	786	(3,013)	(5,157)	1,603	46,271
Gains (losses) on fair value hedging relationships							
Interest contracts							
Amounts related to interest settlements on derivatives (2)	(469)	(1)	(5)	36	1,286	—	847
Recognized on derivatives	(43)	1	(5)	(20)	(912)	—	(979)
Recognized on hedged items	(52)	(1)	(4)	36	938	—	917
Foreign exchange contracts							
Amounts related to interest settlements on derivatives (2)(3)	14	—	—	—	(210)	—	(196)
Recognized on derivatives (4)	13	—	—	—	(230)	3,118	2,901
Recognized on hedged items	(10)	—	—	—	255	(2,855)	(2,610)
Net income (expense) recognized on fair value hedges	(547)	(1)	(14)	52	1,127	263	880
Gains (losses) on cash flow hedging relationships							
Interest contracts							
Realized gains (losses) (pre tax) reclassified from cumulative OCI into net income (5)	—	551	—	—	(8)	—	543
Net income (expense) recognized on cash flow hedges	—	551	—	—	(8)	—	543

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(in millions)	Net interest income: Investment securities	Loans	Mortgages held for sale	Deposits	Long-term debt	Noninterest Income: Other	Total
Year ended December 31, 2016							
Total amounts of line items presented in the consolidated statement of income	9,248	39,505	784	(1,395)	(3,830)	1,289	45,601
Gains (losses) on fair value hedging relationships							
Interest contracts							
Amounts related to interest settlements on derivatives (2)	(582)	—	(6)	62	1,830	—	1,304
Recognized on derivatives	—	—	—	—	—	(2,175)	(2,175)
Recognized on hedged items	—	—	—	—	—	2,157	2,157
Foreign exchange contracts							
Amounts related to interest settlements on derivatives (2) (3)	9	—	—	—	31	—	40
Recognized on derivatives	—	—	—	—	—	(274)	(274)
Recognized on hedged items	—	—	—	—	—	286	286
Net income (expense) recognized on fair value hedges	(573)	—	(6)	62	1,861	(6)	1,338
Gains (losses) on cash flow hedging relationships							
Interest contracts							
Realized gains (losses) (pre tax) reclassified from cumulative OCI into net income (5)	—	1,043	—	—	(14)	—	1,029
Gains (losses) (before tax) recognized in income for hedge ineffectiveness	—	—	—	—	—	(1)	(1)
Net income (expense) recognized on cash flow hedges	—	1,043	—	—	(14)	(1)	1,028
Year ended December 31, 2015							
Total amounts of line items presented in the consolidated statement of income	8,937	36,575	785	(963)	(2,592)	464	43,206
Gains (losses) on fair value hedging relationships							
Interest contracts							
Amounts related to interest settlements on derivatives (2)	(782)	—	(13)	69	1,886	—	1,160
Recognized on derivatives	—	—	—	—	—	300	300
Recognized on hedged items	—	—	—	—	—	(248)	(248)
Foreign exchange contracts							
Amounts related to interest settlements on derivatives (2) (3)	—	—	—	—	182	—	182
Recognized on derivatives	—	—	—	—	—	(2,117)	(2,117)
Recognized on hedged items	—	—	—	—	—	2,143	2,143
Net income (expense) recognized on fair value hedges	(782)	—	(13)	69	2,068	78	1,420
Gains (losses) on cash flow hedging relationships							
Interest contracts							
Realized gains (losses) (pre tax) reclassified from cumulative OCI into net income (5)	3	1,103	—	—	(17)	—	1,089
Gains (losses) (before tax) recognized in income for hedge ineffectiveness	—	—	—	—	—	1	1
Net income (expense) recognized on cash flow hedges	3	1,103	—	—	(17)	1	1,090

(1) Prior period gain or loss amounts and presentation location were not conformed to new hedge accounting guidance that we adopted in 2017.
(2) Includes $(143) million, $(104) million and $(106) million for years ended December 31, 2017, 2016, and 2015, respectively, which represents changes in fair value due to the passage of time associated with the non-zero fair value amount at hedge inception.
(3) Includes $(3) million, $(13) million and $(7) million for years ended December 31, 2017, 2016, and 2015, respectively, of the time value component recognized as net interest income (expense) on forward derivatives hedging foreign currency available-for-sale securities and long-term debt that were excluded from the assessment of hedge effectiveness.
(4) For certain fair value hedges of foreign currency risk, changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. See Note 24 (Other Comprehensive Income) for the amounts recognized in other comprehensive income.
(5) See Note 24 (Other Comprehensive Income) for details of amounts reclassified to net income.

Table 16.4 shows the carrying amount and associated cumulative basis adjustment related to the application of hedge accounting that is included in the carrying amount of hedged assets and liabilities in fair value hedging relationships.

Table 16.4: Hedged Items in Fair Value Hedging Relationship

	Hedged Items Currently Designated		Hedged Items No Longer Designated (1)	
(in millions)	Carrying Amount of Assets/(Liabilities) (2)(4)	Hedge Accounting Basis Adjustment Assets/(Liabilities) (3)	Carrying Amount of Assets/(Liabilities) (4)	Hedge Accounting Basis Adjustment Assets/(Liabilities)
December 31, 2017				
Investment securities, Available-for-sale (5)	32,498	870	5,221	343
Loans	140	(1)	—	—
Mortgages held for sale	465	(1)	—	—
Deposits	(23,679)	158	—	—
Long-term debt	(128,950)	(2,154)	(1,953)	16

(1) Represents hedged items no longer designated in qualifying fair value hedging relationships for which an associated basis adjustment exists at the balance sheet date.
(2) Does not include the carrying amount of hedged items where only foreign currency risk is the designated hedged risk. The carrying amount excluded for investment securities is $1.5 billion and for long-term debt is $(7.7) billion.
(3) The balance includes $2.1 billion and $297 million of investment securities and long-term debt cumulative basis adjustments, respectively, on terminated hedges whereby the hedged items have subsequently been re-designated into existing hedges.
(4) Represents the full carrying amount of the hedged asset or liability item as of the balance sheet date, except for circumstances in which only a portion of the asset or liability was designated as the hedged item in which case only the portion designated is presented.
(5) Carrying amount represents the amortized cost.

Derivatives Not Designated as Hedging Instruments

We use economic hedge derivatives to hedge the risk of changes in the fair value of certain residential MHFS, certain loans held for investment, residential MSRs measured at fair value, derivative loan commitments and other interests held. We also use economic hedge derivatives to mitigate the periodic earnings volatility caused by mismatches between the changes in fair value of the hedged item and hedging instrument recognized on our fair value accounting hedges. The resulting gain or loss on these economic hedge derivatives is reflected in mortgage banking noninterest income, net gains (losses) from equity investments and other noninterest income.

The derivatives used to hedge MSRs measured at fair value, which include swaps, swaptions, constant maturity mortgages, forwards, Eurodollar and Treasury futures and options contracts, resulted in net derivative gains of $413 million in 2017, net derivative gains of $261 million in 2016 and net derivative gains of $671 million in 2015, which are included in mortgage banking noninterest income. The aggregate fair value of these derivatives was a net asset of $89 million at December 31, 2017, and a net liability of $617 million at December 31, 2016. The change in fair value of these derivatives for each period end is due to changes in the underlying market indices and interest rates as well as the purchase and sale of derivative financial instruments throughout the period as part of our dynamic MSR risk management process.

Interest rate lock commitments for mortgage loans that we intend to sell are considered derivatives. Our interest rate exposure on these derivative loan commitments, as well as residential MHFS, is hedged with economic hedge derivatives such as swaps, forwards and options, Eurodollar futures and options, and Treasury futures, forwards and options contracts. The derivative loan commitments, economic hedge derivatives and residential MHFS are carried at fair value with changes in fair value included in mortgage banking noninterest income. For the fair value measurement of interest rate lock commitments we include, at inception and during the life of the loan commitment, the expected net future cash flows related to the associated servicing of the loan. Fair value changes subsequent to inception are based on changes in fair value of the underlying loan resulting from the exercise of the commitment and changes in the probability that the loan will not fund within the terms of the commitment (referred to as a fall-out factor). The value of the underlying loan is affected by changes in interest rates and the passage of time. However, changes in investor demand can also cause changes in the value of the underlying loan value that cannot be hedged. The aggregate fair value of derivative loan commitments on the balance sheet was a net asset of $17 million and a net liability of $6 million at December 31, 2017 and 2016, respectively, and is included in the caption "Interest rate contracts" under "Customer accommodation trading and other derivatives" in Table 16.1.

We also enter into various derivatives as an accommodation to our customers as part of our trading businesses. These derivatives are not linked to specific assets and liabilities on the balance sheet or to forecasted transactions in an accounting hedge relationship and, therefore, do not qualify for hedge accounting. We also enter into derivatives for risk management that do not otherwise qualify for hedge accounting. They are carried at fair value with changes in fair value recorded in noninterest income.

Customer accommodation trading and other derivatives also include embedded derivatives that are required to be accounted for separately from their host contract. We periodically issue hybrid long-term notes and CDs where the performance of the hybrid instrument notes is linked to an equity, commodity or currency index, or basket of such indices. These notes contain explicit terms that affect some or all of the cash flows or the value of the note in a manner similar to a derivative instrument and therefore are considered to contain an "embedded" derivative instrument. The indices on which the performance of the hybrid instrument is calculated are not clearly and closely related to the host debt instrument. The "embedded" derivative is separated from the host contract and accounted for as a derivative. Additionally, we may invest in hybrid instruments that contain embedded derivatives, such as credit derivatives, that are not clearly and closely related to the host contract. In such instances, we either elect fair value option for the hybrid instrument or separate the embedded derivative from the host contract and account for the host contract and derivative separately.

Table 16.5 shows the net gains (losses), recognized by income statement lines, related to derivatives not designated as hedging instruments.

Table 16.5: Gains (Losses) on Derivatives Not Designated as Hedging Instruments

		Noninterest income			
(in millions)	Mortgage banking	Net gains (losses) from equity investments	Net gains (losses) from trading activities	Other	Total
Year ended December 31, 2017					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	$ 448	—	—	(75)	373
Equity contracts	—	(1,483)	—	17	(1,466)
Foreign exchange contracts	—	—	—	(866)	(866)
Credit contracts	—	—	—	5	5
Subtotal (2)	448	(1,483)	—	(919)	(1,954)
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts (3)	614	—	160	—	774
Equity contracts	—	—	(3,932)	1	(3,931)
Foreign exchange contracts	—	—	638	—	638
Credit contracts	—	—	(81)	—	(81)
Commodity contracts	—	—	178	—	178
Other	—	—	—	—	—
Subtotal	614	—	(3,037)	1	(2,422)
Net gains (losses) recognized related to derivatives not designated as hedging instruments	$ 1,062	(1,483)	(3,037)	(918)	(4,376)

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				Noninterest income	
(in millions)	Mortgage banking	Net gains (losses) from equity investments	Net gains (losses) from trading activities	Other	Total
Year ended December 31, 2016					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	$ 1,029	—	—	(51)	978
Equity contracts	—	125	—	(11)	114
Foreign exchange contracts	—	—	—	954	954
Credit contracts	—	—	—	21	21
Subtotal (2)	1,029	125	—	913	2,067
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts (3)	818	—	255	—	1,073
Equity contracts	—	—	(1,643)	—	(1,643)
Foreign exchange contracts	—	—	1,077	—	1,077
Credit contracts	—	—	(105)	—	(105)
Commodity contracts	—	—	216	—	216
Other	—	—	11	—	11
Subtotal	818	—	(189)	—	629
Net gains (losses) recognized related to derivatives not designated as hedging instruments	$ 1,847	125	(189)	913	2,696
Year ended December 31, 2015					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	$ 723	—	—	(42)	681
Equity contracts	—	(393)	—	—	(393)
Foreign exchange contracts	—	—	—	496	496
Credit contracts	—	—	—	—	—
Subtotal (2)	723	(393)	—	454	784
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts (3)	941	—	265	—	1,206
Equity contracts	—	—	563	—	563
Foreign exchange contracts	—	—	812	—	812
Credit contracts	—	—	44	—	44
Commodity contracts	—	—	88	—	88
Other	—	—	(15)	—	(15)
Subtotal	941	—	1,757	—	2,698
Net gains (losses) recognized related to derivatives not designated as hedging instruments	$ 1,664	(393)	1,757	454	3,482

(1) Includes gains (losses) on the derivatives used as economic hedges of MSRs measured at fair value, interest rate lock commitments and mortgages held for sale.
(2) Includes hedging losses of $(71) million, $(8) million, and $(24) million for the years ended December 31, 2017, 2016, and 2015, respectively, which partially offset hedge accounting ineffectiveness.
(3) Amounts presented in mortgage banking noninterest income are gains on interest rate lock commitments.

Credit Derivatives

Credit derivative contracts are arrangements whose value is derived from the transfer of credit risk of a reference asset or entity from one party (the purchaser of credit protection) to another party (the seller of credit protection). We use credit derivatives to assist customers with their risk management objectives. We may also use credit derivatives in structured product transactions or liquidity agreements written to special purpose vehicles. The maximum exposure of sold credit derivatives is managed through posted collateral, purchased credit derivatives and similar products in order to achieve our desired credit risk profile. This credit risk management provides an ability to recover a significant portion of any amounts that would be paid under the sold credit derivatives. We would be required to perform under the sold credit derivatives in the event of default by the referenced obligors. Events of default include events such as bankruptcy, capital restructuring or lack of principal and/or interest payment. In certain cases, other triggers may exist, such as the credit downgrade of the referenced obligors or the inability of the special purpose vehicle for which we have provided liquidity to obtain funding.

Table 16.6 provides details of sold and purchased credit derivatives.

Table 16.6: Sold and Purchased Credit Derivatives

(in millions)	Fair value liability	Notional amount: Protection sold (A)	Protection sold - non-investment grade	Protection purchased with identical underlyings (B)	Net protection sold (A)-(B)	Other protection purchased	Range of maturities
December 31, 2017							
Credit default swaps on:							
Corporate bonds	**$ 35**	**2,007**	**510**	**1,575**	**432**	**946**	**2018 - 2027**
Structured products	**86**	**267**	**252**	**232**	**35**	**153**	**2022 - 2047**
Credit protection on:							
Default swap index	**—**	**2,626**	**540**	**308**	**2,318**	**3,932**	**2018 - 2027**
Commercial mortgage-backed securities index	**83**	**423**	**—**	**401**	**22**	**87**	**2047 - 2058**
Asset-backed securities index	**9**	**42**	**—**	**42**	**—**	**1**	**2045 - 2046**
Other	**1**	**3,656**	**3,306**	**—**	**3,656**	**9,840**	**2018 - 2031**
Total credit derivatives	**$ 214**	**9,021**	**4,608**	**2,558**	**6,463**	**14,959**	
December 31, 2016							
Credit default swaps on:							
Corporate bonds	$ 22	4,324	1,704	3,060	1,264	1,804	2017 - 2026
Structured products	193	405	333	295	110	79	2020 - 2047
Credit protection on:							
Default swap index	—	1,515	257	139	1,376	3,668	2017 - 2021
Commercial mortgage-backed securities index	156	627	—	584	43	71	2047 - 2058
Asset-backed securities index	17	45	—	40	5	187	2045 - 2046
Other	1	3,567	3,568	—	3,567	10,519	2017 - 2047
Total credit derivatives	$ 389	10,483	5,862	4,118	6,365	16,328	

Protection sold represents the estimated maximum exposure to loss that would be incurred under an assumed hypothetical circumstance, where the value of our interests and any associated collateral declines to zero, without any consideration of recovery or offset from any economic hedges. We believe this hypothetical circumstance to be an extremely remote possibility and accordingly, this required disclosure is not an indication of expected loss. The amounts under non-investment grade represent the notional amounts of those credit derivatives on which we have a higher risk of being required to perform under the terms of the credit derivative and are a function of the underlying assets.

We consider the risk of performance to be high if the underlying assets under the credit derivative have an external rating that is below investment grade or an internal credit default grade that is equivalent thereto. We believe the net protection sold, which is representative of the net notional amount of protection sold and purchased with identical underlyings, in combination with other protection purchased, is more representative of our exposure to loss than either non-investment grade or protection sold. Other protection purchased represents additional protection, which may offset the exposure to loss for protection sold, that was not purchased with an identical underlying of the protection sold.

Credit-Risk Contingent Features

Certain of our derivative contracts contain provisions whereby if the credit rating of our debt were to be downgraded by certain major credit rating agencies, the counterparty could demand additional collateral or require termination or replacement of derivative instruments in a net liability position. The aggregate fair value of all derivative instruments with such credit-risk-related contingent features that are in a net liability position was $8.3 billion at December 31, 2017, and $12.8 billion at December 31, 2016, respectively, for which we posted $7.1 billion and $8.9 billion, respectively, in collateral in the normal course of business. If the credit rating of our debt had been downgraded below investment grade, which is the credit-risk-related contingent feature that if triggered requires the maximum amount of collateral to be posted, on December 31, 2017, or December 31, 2016, we would have been required to post additional collateral of $1.2 billion or $4.0 billion, respectively, or potentially settle the contract in an amount equal to its fair value. Some contracts require that we provide more collateral than the fair value of derivatives that are in a net liability position if a downgrade occurs.

Counterparty Credit Risk

By using derivatives, we are exposed to counterparty credit risk if counterparties to the derivative contracts do not perform as expected. If a counterparty fails to perform, our counterparty credit risk is equal to the amount reported as a derivative asset on our balance sheet. The amounts reported as a derivative asset are derivative contracts in a gain position, and to the extent subject to legally enforceable master netting arrangements, net of derivatives in a loss position with the same counterparty and cash collateral received. We minimize counterparty credit risk through credit approvals, limits, monitoring procedures, executing master netting arrangements and obtaining collateral, where appropriate. To the extent the master netting arrangements and other criteria meet the applicable requirements, including determining the legal enforceability of the arrangement, it is our policy to present derivative balances and related cash collateral amounts net on the balance sheet. We incorporate credit valuation adjustments (CVA) to reflect counterparty credit risk in determining the fair value of our derivatives. Such adjustments, which consider the effects of enforceable master netting agreements and collateral arrangements, reflect market-based views of the credit quality of each counterparty. Our CVA calculation is determined based on observed credit spreads in the credit default swap market and indices indicative of the credit quality of the counterparties to our derivatives.

Note 17: Fair Values of Assets and Liabilities

We use fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Assets and liabilities recorded at fair value on a recurring basis are presented in Table 17.2 in this Note. From time to time, we may be required to record fair value adjustments on a nonrecurring basis. These nonrecurring fair value adjustments typically involve application of LOCOM accounting or write-downs of individual assets. Assets recorded on a nonrecurring basis are presented in Table 17.12 in this Note.

Following is a discussion of the fair value hierarchy and the valuation methodologies used for assets and liabilities recorded at fair value on a recurring or nonrecurring basis and for estimating fair value for financial instruments not recorded at fair value.

Fair Value Hierarchy

We group our assets and liabilities measured at fair value in three levels based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

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

In accordance with new accounting guidance that we adopted effective January 1, 2016, we do not classify an investment in the fair value hierarchy if we use the non-published net asset value (NAV) per share (or its equivalent) that has been communicated to us as an investor as a practical expedient to measure fair value. We generally use NAV per share as the fair value measurement for certain nonmarketable equity fund investments. Marketable equity investments with published NAVs continue to be classified in the fair value hierarchy.

In the determination of the classification of financial instruments in Level 2 or Level 3 of the fair value hierarchy, we consider all available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs used. For securities in inactive markets, we use a predetermined percentage to evaluate the impact of fair value adjustments derived from weighting both external and internal indications of value to determine if the instrument is classified as Level 2 or Level 3. Otherwise, the classification of Level 2 or Level 3 is based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of the Level 3 inputs to the instruments' fair value measurement in its entirety. If Level 3 inputs are considered significant, the instrument is classified as Level 3.

Assets

SHORT-TERM FINANCIAL ASSETS Short-term financial assets include cash and due from banks, federal funds sold and securities purchased under resale agreements and due from customers on acceptances. These assets are carried at historical cost. The carrying amount is a reasonable estimate of fair value because of the relatively short time between the origination of the instrument and its expected realization.

TRADING ASSETS AND INVESTMENT SECURITIES Trading assets and available-for-sale securities are recorded at fair value on a recurring basis. Other investment securities classified as held-to-maturity are subject to impairment and fair value measurement if fair value declines below amortized cost and we do not expect to recover the entire amortized cost basis of the debt security. Fair value measurement is based upon various sources of market pricing. We use quoted prices in active markets, where available, and classify such instruments within Level 1 of the fair value hierarchy. Examples include exchange-traded equity securities and some highly liquid government securities, such as U.S. Treasuries. When instruments are traded in secondary markets and quoted market prices do not exist for such securities, we generally rely on internal valuation techniques or on prices obtained from vendors (predominantly third-party pricing services), and accordingly, we classify these instruments as Level 2 or 3.

Trading securities are valued using internal trader prices that are subject to price verification procedures. The fair values derived using internal valuation techniques are verified against multiple pricing sources, including prices obtained from third-party vendors. Vendors compile prices from various sources and often apply matrix pricing for similar securities when no price is observable. We review pricing methodologies provided by the vendors in order to determine if observable market information is being used versus unobservable inputs. When evaluating the appropriateness of an internal trader price compared with vendor prices, considerations include the range and quality of vendor prices. Vendor prices are used to ensure the reasonableness of a trader price; however, valuing financial instruments involves judgments acquired from knowledge of a particular market. If a trader asserts that a vendor price is not reflective of market value, justification for using the trader price, including recent sales activity where possible, must be provided to and approved by the appropriate levels of management.

Similarly, while investment securities traded in secondary markets are typically valued using unadjusted vendor prices or vendor prices adjusted by weighting them with internal discounted cash flow techniques, these prices are reviewed and, if deemed inappropriate by a trader who has the most knowledge of a particular market, can be adjusted. These investment securities, which include those measured using unadjusted vendor prices, are generally classified as Level 2 and typically involve using quoted market prices for the same or similar securities, pricing models, discounted cash flow analyses using significant inputs observable in the market where available or a combination of multiple valuation techniques. Examples include certain residential and commercial MBS, other asset-backed securities municipal bonds, U.S. government and agency MBS, and corporate debt securities.

Security fair value measurements using significant inputs that are unobservable in the market due to limited activity or a less liquid market are classified as Level 3 in the fair value hierarchy. Such measurements include securities valued using internal models or a combination of multiple valuation techniques where the unobservable inputs are significant to the overall fair value measurement. Securities classified as Level 3 include certain residential and commercial MBS, other asset-backed securities, CDOs and certain CLOs, and certain residual and retained interests in residential mortgage loan securitizations. We value CDOs using the prices of similar instruments, the pricing of completed or pending third-party transactions or the pricing of the underlying collateral within the CDO. Where vendor prices are not readily available, we use management's best estimate.

MORTGAGES HELD FOR SALE (MHFS) MHFS are carried at LOCOM or at fair value. We carry substantially all of our residential MHFS portfolio at fair value. Fair value is based on quoted market prices, where available, or the prices for other mortgage whole loans with similar characteristics. As necessary, these prices are adjusted for typical securitization activities, including servicing value, portfolio composition, market conditions and liquidity. Predominantly all of our MHFS are classified as Level 2. For the portion where market pricing data is not available, we use a discounted cash flow model to estimate fair value and, accordingly, classify as Level 3.

LOANS HELD FOR SALE (LHFS) LHFS are carried at LOCOM or at fair value. The fair value of LHFS is based on current offerings in secondary markets for loans with similar characteristics. As such, we classify those loans subjected to nonrecurring fair value adjustments as Level 2.

LOANS For information on how we report the carrying value of loans, see Note 1 (Summary of Significant Accounting Policies). Although most loans are not recorded at fair value on a recurring basis, reverse mortgages are recorded at fair value on a recurring basis. In addition, we record nonrecurring fair value adjustments to loans to reflect partial write-downs that are based on the observable market price of the loan or current appraised value of the collateral.

We provide fair value estimates in this disclosure for loans that are not recorded at fair value on a recurring or nonrecurring basis. Those estimates differentiate loans based on their financial characteristics, such as product classification, loan category, pricing features and remaining maturity. Prepayment and credit loss estimates are evaluated by product and loan rate.

The fair value of commercial loans is calculated by discounting contractual cash flows, adjusted for credit loss estimates, using discount rates that are appropriate for loans with similar characteristics and remaining maturity. For real estate 1-4 family first and junior lien mortgages, we calculate fair value by discounting contractual cash flows, adjusted for prepayment and credit loss estimates, using discount rates based on current industry pricing (where readily available) or our own estimate of an appropriate discount rate for loans of similar size, type, remaining maturity and repricing characteristics.

The estimated fair value of consumer loans is generally calculated by discounting the contractual cash flows, adjusted for prepayment and credit loss estimates, based on the current rates we offer for loans with similar characteristics.

Loan commitments, standby letters of credit and commercial and similar letters of credit generate ongoing fees at our current pricing levels, which are recognized over the term of the commitment period. In situations where the credit quality of the counterparty to a commitment has declined, we record an allowance. A reasonable estimate of the fair value of these instruments is the carrying value of deferred fees plus the allowance for unfunded credit commitments.

DERIVATIVES Quoted market prices are available and used for our exchange-traded derivatives, such as certain interest rate futures and option contracts, which we classify as Level 1. However, substantially all of our derivatives are traded in over-the-counter (OTC) markets where quoted market prices are not always readily available. Therefore we value most OTC derivatives using internal valuation techniques. Valuation techniques and inputs to internally-developed models depend on the type of derivative and nature of the underlying rate, price or index upon which the derivative's value is based. Key inputs can include yield curves, credit curves, foreign exchange rates, prepayment rates, volatility measurements and correlation of such inputs. Where model inputs can be observed in a liquid market and the model does not require significant judgment, such derivatives are typically classified as Level 2 of the fair value hierarchy. Examples of derivatives classified as Level 2 include generic interest rate swaps, foreign currency swaps, commodity swaps, and certain option and forward contracts. When instruments are traded in less liquid markets and significant inputs are unobservable, such derivatives are classified as Level 3. Examples of derivatives classified as Level 3 include complex and highly structured derivatives, certain credit default swaps, interest rate lock commitments written for our mortgage loans that we intend to sell and long-dated equity options where volatility is not observable. Additionally, significant judgments are required when classifying financial instruments within the fair value hierarchy, particularly between Level 2 and 3, as is the case for certain derivatives.

MSRs AND CERTAIN OTHER INTERESTS HELD IN SECURITIZATIONS MSRs and certain other interests held in securitizations (e.g., interest-only strips) do not trade in an active market with readily observable prices. Accordingly, we determine the fair value of MSRs using a valuation model that calculates the present value of estimated future net servicing income cash flows. The model incorporates assumptions that market participants use in estimating future net servicing income cash flows, including estimates of prepayment speeds (including housing price volatility), discount rates, default rates, cost to service (including delinquency and foreclosure costs), escrow account earnings, contractual servicing fee income, ancillary income and late fees. Commercial MSRs are carried at LOCOM and, therefore, can be subject to fair value measurements on a nonrecurring basis. Changes in the fair value of MSRs occur primarily due to the collection/realization of expected cash flows as well as changes in valuation inputs and assumptions. For other interests held in securitizations (such as interest-only strips), we use a valuation model that calculates the present value of estimated future cash flows. The model incorporates our own estimates of assumptions market participants use in determining the fair value, including estimates of prepayment speeds, discount rates, defaults and contractual fee income. Interest-only strips are recorded as trading assets. Our valuation approach is validated by our internal valuation model validation group. Fair value measurements of our MSRs and interest-only strips use significant unobservable inputs and, accordingly, we classify them as Level 3.

FORECLOSED ASSETS Foreclosed assets are carried at net realizable value, which represents fair value less costs to sell. Fair value is generally based upon independent market prices or appraised values of the collateral and, accordingly, we classify foreclosed assets as Level 2.

NONMARKETABLE EQUITY INVESTMENTS For certain equity securities that are not publicly traded, we have elected the fair value option, and we use a market comparable pricing technique to estimate their fair value. The remaining nonmarketable equity investments include low income housing tax credit investments, Federal Reserve Bank and Federal Home Loan Bank (FHLB) stock, and private equity investments that are recorded under the cost or equity method of accounting. We estimate fair value to record OTTI write-downs on a nonrecurring basis. Additionally, we provide fair value estimates in this disclosure for cost method investments that are not measured at fair value on a recurring or nonrecurring basis.

Federal Bank stock carrying values approximate fair value. Of the remaining cost or equity method investments for which we determine fair value, we estimate the fair value using all available information and consider the range of potential inputs including discounted cash flow models, transaction prices, trading multiples of comparable public companies, and entry level multiples. Where appropriate these metrics are adjusted to account for comparative differences with public companies and for company-specific issues like liquidity or marketability. For investments in private equity funds, we generally use the NAV provided by the fund sponsor as a practical expedient to measure fair value. In some cases, NAVs may require adjustments based on certain unobservable inputs.

Liabilities

DEPOSIT LIABILITIES Deposit liabilities are carried at historical cost. The fair value of deposits with no stated maturity, such as noninterest-bearing demand deposits, interest-bearing checking, and market rate and other savings, is equal to the amount payable on demand at the measurement date. The fair value of other time deposits is calculated based on the discounted value of contractual cash flows. The discount rate is estimated using the rates currently offered for like wholesale deposits with similar remaining maturities.

SHORT-TERM FINANCIAL LIABILITIES Short-term financial liabilities are carried at historical cost and include federal funds purchased and securities sold under repurchase agreements, commercial paper and other short-term borrowings. The carrying amount is a reasonable estimate of fair value because of the relatively short time between the origination of the instrument and its expected realization.

OTHER LIABILITIES Other liabilities recorded at fair value on a recurring basis predominantly include short sale liabilities. Short sale liabilities are predominantly classified as either Level 1 or Level 2, generally depending upon whether the underlying securities have readily obtainable quoted prices in active exchange markets.

LONG-TERM DEBT Long-term debt is generally carried at amortized cost. For disclosure, we are required to estimate the fair value of long-term debt and generally do so using the discounted cash flow method. Contractual cash flows are discounted using rates currently offered for new notes with similar remaining maturities and, as such, these discount rates include our current spread levels.

Level 3 Asset and Liability Valuation Processes

We generally determine fair value of our Level 3 assets and liabilities by using internally-developed models and, to a lesser extent, prices obtained from vendors, which predominantly consist of third-party pricing services. Our valuation processes vary depending on which approach is utilized.

INTERNAL MODEL VALUATIONS Our internally-developed models largely use discounted cash flow techniques. Use of such techniques requires determining relevant inputs, some of which are unobservable. Unobservable inputs are generally derived from historic performance of similar assets or determined from previous market trades in similar instruments. These unobservable inputs usually consist of discount rates, default rates, loss severity upon default, volatilities, correlations and prepayment rates, which are inherent within our Level 3 instruments. Such inputs can be correlated to similar portfolios with known historic experience or recent trades where particular unobservable inputs may be implied, but due to the nature of various inputs being reflected within a particular trade, the value of each input is considered unobservable. We attempt to correlate each unobservable input to historic experience and other third-party data where available.

Internal valuation models are subject to review prescribed within our model risk management policies and procedures, which include model validation. The purpose of model validation includes ensuring the model is appropriate for its intended use and the appropriate controls exist to help mitigate risk of invalid valuations. Model validation assesses the adequacy and appropriateness of the model, including reviewing its key components, such as inputs, processing components, logic or theory, output results and supporting model documentation. Validation also includes ensuring significant unobservable model inputs are appropriate given observable market transactions or other market data within the same or similar asset classes. This process ensures modeled approaches are appropriate given similar product valuation techniques and are in line with their intended purpose.

We have ongoing monitoring procedures in place for our Level 3 assets and liabilities that use such internal valuation models. These procedures, which are designed to provide reasonable assurance that models continue to perform as expected after approved, include:

- ongoing analysis and benchmarking to market transactions and other independent market data (including pricing vendors, if available);
- back-testing of modeled fair values to actual realized transactions; and
- review of modeled valuation results against expectations, including review of significant or unusual value fluctuations.

We update model inputs and methodologies periodically to reflect these monitoring procedures. Additionally, procedures and controls are in place to ensure existing models are subject to periodic reviews, and we perform full model revalidations as necessary.

All internal valuation models are subject to ongoing review by business-unit-level management, and all models are subject to additional oversight by a corporate-level risk management department. Corporate oversight responsibilities include evaluating the adequacy of business unit risk management programs, maintaining company-wide model validation policies and standards and reporting the results of these activities to management and our Corporate Model Risk Committee. This committee consists of senior executive management and reports on top model risk issues to the Company's Risk Committee of the Board.

VENDOR-DEVELOPED VALUATIONS In certain limited circumstances, we obtain pricing from third-party vendors for the value of our Level 3 assets or liabilities. We have processes in place to approve such vendors to ensure information obtained and valuation techniques used are appropriate. Once these vendors are approved to provide pricing information, we monitor and review the results to ensure the fair values are reasonable and in line with market experience in similar asset classes. While the input amounts used by the pricing vendor in determining fair value are not provided, and therefore unavailable for our review, we do perform one or more of the following procedures to validate the prices received:
- comparison to other pricing vendors (if available);
- variance analysis of prices;
- corroboration of pricing by reference to other independent market data, such as market transactions and relevant benchmark indices;
- review of pricing by Company personnel familiar with market liquidity and other market-related conditions; and
- investigation of prices on a specific instrument-by-instrument basis.

Fair Value Measurements from Vendors

For certain assets and liabilities, we obtain fair value measurements from vendors, which predominantly consist of third-party pricing services, and record the unadjusted fair value in our financial statements. For instruments where we utilize vendor prices to record the price of an instrument, we perform additional procedures (see the "Vendor-Developed Valuations" section). Methodologies employed, controls relied upon and inputs used by third-party pricing vendors are subject to additional review when such services are provided. This review may consist of, in part, obtaining and evaluating control reports issued and pricing methodology materials distributed.

Table 17.1 presents unadjusted fair value measurements provided by brokers or third-party pricing services by fair value hierarchy level . Fair value measurements obtained from brokers or third-party pricing services that we have adjusted to determine the fair value recorded in our financial statements are excluded from Table 17.1.

Table 17.1: Fair Value Measurements by Brokers or Third-Party Pricing Services

		Brokers			Third-party pricing services	
(in millions)	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
December 31, 2017						
Trading assets	$ —	—	—	926	215	—
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	—	—	—	3,389	2,930	—
Securities of U.S. states and political subdivisions	—	—	—	—	50,401	49
Mortgage-backed securities	—	33	—	—	168,948	75
Other debt securities (1)	—	307	1,158	—	44,465	22
Total debt securities	—	340	1,158	3,389	266,744	146
Total marketable equity securities	—	—	—	—	227	—
Total available-for-sale securities	—	340	1,158	3,389	266,971	146
Derivative assets	—	—	—	19	—	—
Derivative liabilities	—	—	—	(19)	—	—
Other liabilities (2)	—	—	—	—	—	—
December 31, 2016						
Trading assets	$ —	—	—	899	60	—
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	—	—	—	22,870	2,949	—
Securities of U.S. states and political subdivisions	—	—	—	—	49,837	208
Mortgage-backed securities	—	171	—	—	176,923	92
Other debt securities (1)	—	450	968	—	49,162	54
Total debt securities	—	621	968	22,870	278,871	354
Total marketable equity securities	—	—	—	—	358	—
Total available-for-sale securities	—	621	968	22,870	279,229	354
Derivative assets	—	—	—	22	—	—
Derivative liabilities	—	—	—	(109)	(1)	—
Other liabilities (2)	—	—	—	—	—	—

(1) Includes corporate debt securities, collateralized loan and other debt obligations, asset-backed securities, and other debt securities.
(2) Includes short sale liabilities and other liabilities.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Table 17.2 presents the balances of assets and liabilities recorded at fair value on a recurring basis.

Table 17.2: Fair Value on a Recurring Basis

(in millions)	Level 1	Level 2	Level 3	Netting	Total
December 31, 2017					
Trading assets					
Securities of U.S. Treasury and federal agencies	$ 12,491	2,383	—	—	14,874
Securities of U.S. states and political subdivisions	—	3,732	3	—	3,735
Collateralized loan obligations	—	565	354	—	919
Corporate debt securities	—	11,760	31	—	11,791
Mortgage-backed securities	—	25,273	—	—	25,273
Asset-backed securities	—	993	—	—	993
Equity securities	33,480	210	—	—	33,690
Total trading securities (1)	45,971	44,916	388	—	91,275
Other trading assets	—	1,021	33	—	1,054
Total trading assets	45,971	45,937	421	—	92,329
Securities of U.S. Treasury and federal agencies	3,389	2,930	—	—	6,319
Securities of U.S. states and political subdivisions	—	50,401	925	—	51,326
Mortgage-backed securities:					
Federal agencies	—	160,219	—	—	160,219
Residential	—	4,607	1	—	4,608
Commercial	—	4,490	75	—	4,565
Total mortgage-backed securities	—	169,316	76	—	169,392
Corporate debt securities	56	7,203	407	—	7,666
Collateralized loan and other debt obligations (2)	—	35,036	1,020	—	36,056
Asset-backed securities:					
Automobile loans and leases	—	553	—	—	553
Home equity loans	—	149	—	—	149
Other asset-backed securities	—	4,380	566	—	4,946
Total asset-backed securities	—	5,082	566	—	5,648
Other debt securities	—	—	—	—	—
Total debt securities	3,445	269,968	2,994 (3)	—	276,407
Marketable equity securities:					
Perpetual preferred securities	131	227	—	—	358
Other marketable equity securities	320	—	—	—	320
Total marketable equity securities	451	227	—	—	678
Total available-for-sale securities	3,896	270,195	2,994	—	277,085
Mortgages held for sale	—	15,118	998	—	16,116
Loans	—	—	376	—	376
Mortgage servicing rights (residential)	—	—	13,625	—	13,625
Derivative assets:					
Interest rate contracts	17	17,479	134	—	17,630
Commodity contracts	—	2,318	36	—	2,354
Equity contracts	1,698	3,970	1,339	—	7,007
Foreign exchange contracts	19	8,944	10	—	8,973
Credit contracts	—	269	122	—	391
Netting	—	—	—	(24,127) (4)	(24,127)
Total derivative assets	1,734	32,980	1,641	(24,127)	12,228
Other assets – excluding nonmarketable equity investments at NAV	—	46	4,821	—	4,867
Total assets included in the fair value hierarchy	$ 51,601	364,276	24,876	(24,127)	416,626
Other assets – nonmarketable equity investments at NAV (5)					—
Total assets recorded at fair value					416,626
Derivative liabilities:					
Interest rate contracts	$ (17)	(15,392)	(63)	—	(15,472)
Commodity contracts	—	(1,318)	(17)	—	(1,335)
Equity contracts	(1,313)	(5,338)	(1,850)	—	(8,501)
Foreign exchange contracts	(19)	(8,546)	(3)	—	(8,568)
Credit contracts	—	(336)	(86)	—	(422)
Other derivative contracts	—	—	—	—	—
Netting	—	—	—	25,502 (4)	25,502
Total derivative liabilities	(1,349)	(30,930)	(2,019)	25,502	(8,796)
Short sale liabilities:					
Securities of U.S. Treasury and federal agencies	(10,420)	(568)	—	—	(10,988)
Corporate debt securities	—	(4,986)	—	—	(4,986)
Equity securities	(2,168)	(45)	—	—	(2,213)
Other securities	—	(285)	—	—	(285)
Total short sale liabilities	(12,588)	(5,884)	—	—	(18,472)
Other liabilities	—	—	(3)	—	(3)
Total liabilities recorded at fair value	$ (13,937)	(36,814)	(2,022)	25,502	(27,271)

(1) Net gains from trading activities recognized in the income statement for the year ended December 31, 2017, include $2.1 billion in net unrealized gains on trading securities held at December 31, 2017.
(2) Includes collateralized debt obligations of $1.0 billion.
(3) Balance primarily consists of securities that are investment grade based on ratings received from the ratings agencies or internal credit grades categorized as investment grade if external ratings are not available. The securities are classified as Level 3 due to limited market activity.
(4) Represents balance sheet netting of derivative asset and liability balances and related cash collateral. See Note 16 (Derivatives) for additional information.
(5) Consists of certain nonmarketable equity investments that are measured at fair value using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

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(in millions)		Level 1	Level 2	Level 3		Netting		Total
December 31, 2016								
Trading assets								
Securities of U.S. Treasury and federal agencies	$	14,950	2,710	—		—		17,660
Securities of U.S. states and political subdivisions		—	2,910	3		—		2,913
Collateralized loan obligations		—	501	309		—		810
Corporate debt securities		—	9,481	34		—		9,515
Mortgage-backed securities		—	20,254	—		—		20,254
Asset-backed securities		—	1,128	—		—		1,128
Equity securities		20,462	290	—		—		20,752
Total trading securities (1)		35,412	37,274	346		—		73,032
Other trading assets		—	1,337	28		—		1,365
Total trading assets		35,412	38,611	374		—		74,397
Securities of U.S. Treasury and federal agencies		22,870	2,949	—		—		25,819
Securities of U.S. states and political subdivisions		—	49,961	1,140	(2)	—		51,101
Mortgage-backed securities:								
Federal agencies		—	161,230	—		—		161,230
Residential		—	7,815	1		—		7,816
Commercial		—	8,411	91		—		8,502
Total mortgage-backed securities		—	177,456	92		—		177,548
Corporate debt securities		58	10,967	432		—		11,457
Collateralized loan and other debt obligations (3)		—	34,141	879	(2)	—		35,020
Asset-backed securities:								
Automobile loans and leases		—	9	—		—		9
Home equity loans		—	327	—		—		327
Other asset-backed securities		—	4,909	962	(2)	—		5,871
Total asset-backed securities		—	5,245	962		—		6,207
Other debt securities		—	1	—		—		1
Total debt securities		22,928	280,720	3,505		—		307,153
Marketable equity securities:								
Perpetual preferred securities		112	357	—		—		469
Other marketable equity securities		741	1	—		—		742
Total marketable equity securities		853	358	—		—		1,211
Total available-for-sale securities		23,781	281,078	3,505		—		308,364
Mortgages held for sale		—	21,057	985		—		22,042
Loans		—	—	758		—		758
Mortgage servicing rights (residential)		—	—	12,959		—		12,959
Derivative assets:								
Interest rate contracts		44	64,986	238		—		65,268
Commodity contracts		—	3,020	37		—		3,057
Equity contracts		1,314	2,997	1,047		—		5,358
Foreign exchange contracts		22	10,843	29		—		10,894
Credit contracts		—	280	272		—		552
Netting		—	—	—		(70,631)	(4)	(70,631)
Total derivative assets		1,380	82,126	1,623		(70,631)		14,498
Other assets – excluding nonmarketable equity investments at NAV		—	16	3,259		—		3,275
Total assets included in the fair value hierarchy	$	60,573	422,888	23,463		(70,631)		436,293
Other assets – nonmarketable equity investments at NAV (5)								—
Total assets recorded at fair value								436,293
Derivative liabilities:								
Interest rate contracts	$	(45)	(65,047)	(117)		—		(65,209)
Commodity contracts		—	(2,537)	(14)		—		(2,551)
Equity contracts		(919)	(3,879)	(1,314)		—		(6,112)
Foreign exchange contracts		(109)	(12,616)	(17)		—		(12,742)
Credit contracts		—	(332)	(195)		—		(527)
Other derivative contracts		—	—	(47)		—		(47)
Netting		—	—	—		72,696	(4)	72,696
Total derivative liabilities		(1,073)	(84,411)	(1,704)		72,696		(14,492)
Short sale liabilities:								
Securities of U.S. Treasury and federal agencies		(9,722)	(701)	—		—		(10,423)
Corporate debt securities		—	(4,063)	—		—		(4,063)
Equity securities		(1,795)	—	—		—		(1,795)
Other securities		—	(98)	—		—		(98)
Total short sale liabilities		(11,517)	(4,862)	—		—		(16,379)
Other liabilities		—	—	(4)		—		(4)
Total liabilities recorded at fair value	$	(12,590)	(89,273)	(1,708)		72,696		(30,875)

(1) Net gains from trading activities recognized in the income statement for the year ended December 31, 2016, include $820 million in net unrealized gains on trading securities held at December 31, 2016.
(2) Balances consist of securities that are mostly investment grade based on ratings received from the ratings agencies or internal credit grades categorized as investment grade if external ratings are not available. The securities are classified as Level 3 due to limited market activity.
(3) Includes collateralized debt obligations of $847 million.
(4) Represents balance sheet netting of derivative asset and liability balances and related cash collateral. See Note 16 (Derivatives) for additional information.
(5) Consists of certain nonmarketable equity investments that are measured at fair value using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

Changes in Fair Value Levels

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy and transfer between Level 1, Level 2, and Level 3 accordingly. Observable market data includes but is not limited to quoted prices and market transactions. Changes in economic conditions or market liquidity generally will drive changes in availability of observable market data. Changes in availability of observable market data, which also may result in changing the valuation technique used, are generally the cause of transfers between Level 1, Level 2, and Level 3.

Transfers into and out of Level 1, Level 2, and Level 3 are provided within Table 17.3 for the periods presented. The amounts reported as transfers represent the fair value as of the beginning of the quarter in which the transfer occurred.

Table 17.3: Transfers Between Fair Value Levels

		Transfers Between Fair Value Levels						
		Level 1		Level 2		Level 3 (1)		
(in millions)		In	Out	In	Out	In	Out	Total
Year ended December 31, 2017								
Trading assets	**$**	**—**	**—**	**22**	**(40)**	**40**	**(22)**	**—**
Available-for-sale securities		**—**	**—**	**1,334**	**(5)**	**5**	**(1,334)**	**—**
Mortgages held for sale		**—**	**—**	**10**	**(134)**	**134**	**(10)**	**—**
Other assets		**—**	**—**	**—**	**(1)**	**1**	**—**	**—**
Net derivative assets and liabilities (2)		**—**	**—**	**(43)**	**51**	**(51)**	**43**	**—**
Short sale liabilities		**—**	**—**	**—**	**—**	**—**	**—**	**—**
Total transfers	**$**	**—**	**—**	**1,323**	**(129)**	**129**	**(1,323)**	**—**
Year ended December 31, 2016								
Trading assets	$	55	(48)	61	(56)	1	(13)	—
Available-for-sale securities		—	—	481	(80)	80	(481)	—
Mortgages held for sale		—	—	17	(98)	98	(17)	—
Other assets		—	—	—	—	—	—	—
Net derivative assets and liabilities (2)		—	—	(51)	(41)	41	51	—
Short sale liabilities		(1)	1	(1)	1	—	—	—
Total transfers	$	54	(47)	507	(274)	220	(460)	—
Year ended December 31, 2015								
Trading assets	$	15	(9)	103	(28)	13	(94)	—
Available-for-sale securities (3)		—	—	76	(8)	8	(76)	—
Mortgages held for sale		—	—	471	(194)	194	(471)	—
Other assets		—	—	—	—	—	—	—
Net derivative assets and liabilities (2)		—	—	48	15	(15)	(48)	—
Short sale liabilities		(1)	1	(1)	1	—	—	—
Total transfers	$	14	(8)	697	(214)	200	(689)	—

(1) All transfers in and out of Level 3 are disclosed within the recurring Level 3 rollforward tables in this Note.
(2) Includes transfers of net derivative assets and net derivative liabilities between levels due to changes in observable market data.
(3) Transfers out of Level 3 exclude $640 million in auction rate perpetual preferred equity securities that were transferred in second quarter 2015 from available-for-sale securities to nonmarketable equity investments in other assets. See Note 7 (Premises, Equipment, Lease Commitments and Other Assets) for additional information.

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2017, are presented in Table 17.4.

Table 17.4: Changes in Level 3 Fair Value Assets and Liabilities on a Recurring Basis – 2017

(in millions)	Balance, beginning of period	Total net gains (losses) included in Net income	Total net gains (losses) included in Other comprehensive income	Purchases, sales, issuances and settlements, net (1)	Transfers into Level 3	Transfers out of Level 3	Balance, end of period	Net unrealized gains (losses) included in income related to assets and liabilities held at period end	(2)
Year ended December 31, 2017									
Trading assets:									
Securities of U.S. states and political subdivisions	$ 3	—	—	—	—	—	3	—	
Collateralized loan obligations	309	3	—	42	—	—	354	(13)	
Corporate debt securities	34	2	—	(7)	6	(4)	31	2	
Mortgage-backed securities	—	—	—	—	—	—	—	—	
Asset-backed securities	—	—	—	—	—	—	—	—	
Equity securities	—	—	—	—	—	—	—	—	
Total trading securities	346	5	—	35	6	(4)	388	(11)	
Other trading assets	28	(8)	—	(3)	34	(18)	33	(4)	
Total trading assets	374	(3)	—	32	40	(22)	421	(15)	(3)
Available-for-sale securities:									
Securities of U.S. states and political subdivisions	1,140	4	5	1,105	5	(1,334)	925	—	
Mortgage-backed securities:									
Residential	1	—	—	—	—	—	1	—	
Commercial	91	(4)	—	(12)	—	—	75	(11)	
Total mortgage-backed securities	92	(4)	—	(12)	—	—	76	(11)	
Corporate debt securities	432	(1)	23	(47)	—	—	407	—	
Collateralized loan and other debt obligations	879	22	103	16	—	—	1,020	—	
Asset-backed securities:									
Automobile loans and leases	—	—	—	—	—	—	—	—	
Home equity loans	—	—	—	—	—	—	—	—	
Other asset-backed securities	962	1	3	(400)	—	—	566	—	
Total asset-backed securities	962	1	3	(400)	—	—	566	—	
Total debt securities	3,505	22	134	662	5	(1,334)	2,994	(11)	(4)
Marketable equity securities:									
Perpetual preferred securities	—	—	—	—	—	—	—	—	
Other marketable equity securities	—	—	—	—	—	—	—	—	
Total marketable equity securities	—	—	—	—	—	—	—	—	(5)
Total available-for-sale securities	3,505	22	134	662	5	(1,334)	2,994	(11)	
Mortgages held for sale	985	(36)	—	(75)	134	(10)	998	(34)	(6)
Loans	758	(6)	—	(376)	—	—	376	(12)	(6)
Mortgage servicing rights (residential) (7)	12,959	(2,115)	—	2,781	—	—	13,625	(126)	(6)
Net derivative assets and liabilities:									
Interest rate contracts	121	604	—	(654)	—	—	71	(52)	
Commodity contracts	23	(17)	—	13	2	(2)	19	15	
Equity contracts	(267)	(199)	—	(37)	(53)	45	(511)	(259)	
Foreign exchange contracts	12	(5)	—	—	—	—	7	6	
Credit contracts	77	24	—	(65)	—	—	36	(62)	
Other derivative contracts	(47)	27	—	20	—	—	—	—	
Total derivative contracts	(81)	434	—	(723)	(51)	43	(378)	(352)	(8)
Other assets	3,259	1,563	—	(2)	1	—	4,821	1,569	(5)
Short sale liabilities	—	—	—	—	—	—	—	—	(3)
Other liabilities	(4)	1	—	—	—	—	(3)	—	(6)

(1) See Table 17.5 for detail.
(2) Represents only net gains (losses) that are due to changes in economic conditions and management's estimates of fair value and excludes changes due to the collection/realization of cash flows over time.
(3) Included in net gains (losses) from trading activities and other noninterest income in the income statement.
(4) Included in net gains (losses) from debt securities in the income statement.
(5) Included in net gains (losses) from equity investments in the income statement.
(6) Included in mortgage banking and other noninterest income in the income statement.
(7) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).
(8) Included in mortgage banking, trading activities, equity investments and other noninterest income in the income statement.

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Table 17.5 presents gross purchases, sales, issuances and settlements related to the changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2017.

Table 17.5: Gross Purchases, Sales, Issuances and Settlements – Level 3 – 2017

(in millions)	Purchases	Sales	Issuances	Settlements	Net
Year ended December 31, 2017					
Trading assets:					
Securities of U.S. states and political subdivisions	$ 37	(36)	—	(1)	—
Collateralized loan obligations	439	(250)	—	(147)	42
Corporate debt securities	25	(32)	—	—	(7)
Mortgage-backed securities	—	—	—	—	—
Asset-backed securities	—	—	—	—	—
Equity securities	—	—	—	—	—
Total trading securities	501	(318)	—	(148)	35
Other trading assets	—	(2)	—	(1)	(3)
Total trading assets	501	(320)	—	(149)	32
Available-for-sale securities:					
Securities of U.S. states and political subdivisions	—	(68)	1,369	(196)	1,105
Mortgage-backed securities:					
Residential	—	—	—	—	—
Commercial	—	—	—	(12)	(12)
Total mortgage-backed securities	—	—	—	(12)	(12)
Corporate debt securities	14	(4)	—	(57)	(47)
Collateralized loan and other debt obligations	135	—	—	(119)	16
Asset-backed securities:					
Automobile loans and leases	—	—	—	—	—
Home equity loans	—	—	—	—	—
Other asset-backed securities	—	—	211	(611)	(400)
Total asset-backed securities	—	—	211	(611)	(400)
Total debt securities	149	(72)	1,580	(995)	662
Marketable equity securities:					
Perpetual preferred securities	—	—	—	—	—
Other marketable equity securities	—	—	—	—	—
Total marketable equity securities	—	—	—	—	—
Total available-for-sale securities	149	(72)	1,580	(995)	662
Mortgages held for sale	79	(485)	489	(158)	(75)
Loans	6	(129)	19	(272)	(376)
Mortgage servicing rights (residential) (1)	541	(24)	2,263	1	2,781
Net derivative assets and liabilities:					
Interest rate contracts	—	—	—	(654)	(654)
Commodity contracts	—	—	—	13	13
Equity contracts	—	(118)	—	81	(37)
Foreign exchange contracts	—	—	—	—	—
Credit contracts	6	(3)	—	(68)	(65)
Other derivative contracts	—	—	—	20	20
Total derivative contracts	6	(121)	—	(608)	(723)
Other assets	—	(2)	—	—	(2)
Short sale liabilities	3	(3)	—	—	—
Other liabilities	—	—	—	—	—

(1) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2016, are presented in Table 17.6.

Table 17.6: Changes in Level 3 Fair Value Assets and Liabilities on a Recurring Basis – 2016

(in millions)	Balance, beginning of period	Total net gains (losses) included in: Net income	Total net gains (losses) included in: Other compre-hensive income	Purchases, sales, issuances and settlements, net (1)	Transfers into Level 3	Transfers out of Level 3	Balance, end of period	Net unrealized gains (losses) included in income related to assets and liabilities held at period end	(2)
Year ended December 31, 2016									
Trading assets:									
Securities of U.S. states and political subdivisions	$ 8	—	—	(5)	—	—	3	—	
Collateralized loan obligations	343	(38)	—	15	—	(11)	309	(42)	
Corporate debt securities	56	(7)	—	(13)	—	(2)	34	—	
Mortgage-backed securities	—	—	—	—	—	—	—	—	
Asset-backed securities	—	—	—	—	—	—	—	—	
Equity securities	—	—	—	(1)	1	—	—	—	
Total trading securities	407	(45)	—	(4)	1	(13)	346	(42)	
Other trading assets	34	(6)	—	—	—	—	28	1	
Total trading assets	441	(51)	—	(4)	1	(13)	374	(41)	(3)
Available-for-sale securities:									
Securities of U.S. states and political subdivisions	1,500	6	(25)	60	80	(481)	1,140	—	
Mortgage-backed securities:									
Residential	1	—	—	—	—	—	1	—	
Commercial	73	—	1	17	—	—	91	(1)	
Total mortgage-backed securities	74	—	1	17	—	—	92	(1)	
Corporate debt securities	405	21	35	(29)	—	—	432	(2)	
Collateralized loan and other debt obligations	565	50	(1)	265	—	—	879	—	
Asset-backed securities:									
Automobile loans and leases	—	—	—	—	—	—	—	—	
Home equity loans	—	—	—	—	—	—	—	—	
Other asset-backed securities	1,182	2	(8)	(214)	—	—	962	(4)	
Total asset-backed securities	1,182	2	(8)	(214)	—	—	962	(4)	
Total debt securities	3,726	79	2	99	80	(481)	3,505	(7)	(4)
Marketable equity securities:									
Perpetual preferred securities	—	—	—	—	—	—	—	—	
Other marketable equity securities	—	—	—	—	—	—	—	—	
Total marketable equity securities	—	—	—	—	—	—	—	—	(5)
Total available-for-sale securities	3,726	79	2	99	80	(481)	3,505	(7)	
Mortgages held for sale	1,082	(19)	—	(159)	98	(17)	985	(24)	(6)
Loans	5,316	(59)	—	(4,499)	—	—	758	(24)	(6)
Mortgage servicing rights (residential) (7)	12,415	(1,595)	—	2,139	—	—	12,959	565	(6)
Net derivative assets and liabilities:									
Interest rate contracts	288	843	—	(1,003)	—	(7)	121	170	
Commodity contracts	12	10	—	(2)	4	(1)	23	11	
Equity contracts	(111)	(80)	—	(156)	21	59	(267)	(176)	
Foreign exchange contracts	—	(3)	—	(1)	16	—	12	(4)	
Credit contracts	(3)	31	—	49	—	—	77	26	
Other derivative contracts	(58)	11	—	—	—	—	(47)	11	
Total derivative contracts	128	812	—	(1,113)	41	51	(81)	38	(8)
Other assets	3,065	(30)	—	224	—	—	3,259	(30)	(5)
Short sale liabilities	—	—	—	—	—	—	—	—	(3)
Other liabilities	(30)	1	—	25	—	—	(4)	—	(6)

(1) See Table 17.7 for detail.
(2) Represents only net gains (losses) that are due to changes in economic conditions and management's estimates of fair value and excludes changes due to the collection/realization of cash flows over time.
(3) Included in net gains (losses) from trading activities and other noninterest income in the income statement.
(4) Included in net gains (losses) from debt securities in the income statement.
(5) Included in net gains (losses) from equity investments in the income statement.
(6) Included in mortgage banking and other noninterest income in the income statement.
(7) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).
(8) Included in mortgage banking, trading activities, equity investments and other noninterest income in the income statement.

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Table 17.7 presents gross purchases, sales, issuances and settlements related to the changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2016.

Table 17.7: Gross Purchases, Sales, Issuances and Settlements – Level 3 – 2016

(in millions)	Purchases	Sales	Issuances	Settlements	Net
Year ended December 31, 2016					
Trading assets:					
Securities of U.S. states and political subdivisions	$ 2	(2)	—	(5)	(5)
Collateralized loan obligations	372	(357)	—	—	15
Corporate debt securities	37	(50)	—	—	(13)
Mortgage-backed securities	—	—	—	—	—
Asset-backed securities	—	—	—	—	—
Equity securities	—	(1)	—	—	(1)
Total trading securities	411	(410)	—	(5)	(4)
Other trading assets	—	—	—	—	—
Total trading assets	411	(410)	—	(5)	(4)
Available-for-sale securities:					
Securities of U.S. states and political subdivisions	28	(24)	547	(491)	60
Mortgage-backed securities:					
Residential	—	—	—	—	—
Commercial	22	—	—	(5)	17
Total mortgage-backed securities	22	—	—	(5)	17
Corporate debt securities	36	(12)	—	(53)	(29)
Collateralized loan and other debt obligations	618	(54)	—	(299)	265
Asset-backed securities:					
Automobile loans and leases	—	—	—	—	—
Home equity loans	—	—	—	—	—
Other asset-backed securities	50	(28)	235	(471)	(214)
Total asset-backed securities	50	(28)	235	(471)	(214)
Total debt securities	754	(118)	782	(1,319)	99
Marketable equity securities:					
Perpetual preferred securities	—	—	—	—	—
Other marketable equity securities	—	—	—	—	—
Total marketable equity securities	—	—	—	—	—
Total available-for-sale securities	754	(118)	782	(1,319)	99
Mortgages held for sale	87	(618)	565	(193)	(159)
Loans	21	(3,791)	302	(1,031)	(4,499)
Mortgage servicing rights (residential) (1)	—	(66)	2,204	1	2,139
Net derivative assets and liabilities:					
Interest rate contracts	—	—	—	(1,003)	(1,003)
Commodity contracts	—	—	—	(2)	(2)
Equity contracts	29	(147)	—	(38)	(156)
Foreign exchange contracts	—	—	—	(1)	(1)
Credit contracts	7	(4)	—	46	49
Other derivative contracts	—	—	—	—	—
Total derivative contracts	36	(151)	—	(998)	(1,113)
Other assets	225	—	—	(1)	224
Short sale liabilities	—	—	—	—	—
Other liabilities	—	—	—	25	25

(1) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2015 are presented in Table 17.8.

Table 17.8: Changes in Level 3 Fair Value Assets and Liabilities on a Recurring Basis – 2015

(in millions)	Balance, beginning of period	Total net gains (losses) included in: Net income	Total net gains (losses) included in: Other compre-hensive income	Purchases, sales, issuances and settlements, net (1)	Transfers into Level 3	Transfers out of Level 3	Balance, end of period	Net unrealized gains (losses) included in income related to assets and liabilities held at period end	(2)
Year ended December 31, 2015									
Trading assets:									
Securities of U.S. states and political subdivisions	$ 7	—	—	1	—	—	8	—	
Collateralized loan obligations	445	8	—	(110)	—	—	343	(28)	
Corporate debt securities	54	2	—	—	12	(12)	56	(2)	
Mortgage-backed securities	—	1	—	(1)	—	—	—	1	
Asset-backed securities	79	16	—	(14)	—	(81)	—	—	
Equity securities	10	1	—	(11)		—	—	—	
Total trading securities	595	28	—	(135)	12	(93)	407	(29)	
Other trading assets	55	3	—	(24)	1	(1)	34	(14)	
Total trading assets	650	31	—	(159)	13	(94)	441	(43)	(3)
Available-for-sale securities:									
Securities of U.S. states and political subdivisions	2,277	6	(16)	(691)	—	(76)	1,500	(5)	
Mortgage-backed securities:									
Residential	24	5	(6)	(22)	—	—	1	—	
Commercial	109	12	(18)	(30)	—	—	73	(2)	
Total mortgage-backed securities	133	17	(24)	(52)	—	—	74	(2)	
Corporate debt securities	252	12	(46)	179	8	—	405	(32)	
Collateralized loan and other debt obligations	1,087	218	(169)	(571)	—	—	565	—	
Asset-backed securities:									
Automobile loans and leases	245	—	19	(264)	—	—	—	—	
Home equity loans	—	—	—	—	—	—	—	—	
Other asset-backed securities	1,372	2	(13)	(179)	—	—	1,182	(1)	
Total asset-backed securities	1,617	2	6	(443)	—	—	1,182	(1)	
Total debt securities	5,366	255	(249)	(1,578)	8	(76)	3,726	(40)	(4)
Marketable equity securities:									
Perpetual preferred securities	663	3	(2)	(24)	—	(640)	—	—	
Other marketable equity securities	—	—	—	—	—	—	—	—	
Total marketable equity securities	663	3	(2)	(24)	—	(640)	—	—	(5)
Total available-for-sale securities	6,029	258	(251)	(1,602)	8	(716)	3,726	(40)	
Mortgages held for sale	2,313	23	—	(977)	194	(471)	1,082	(23)	(6)
Loans	5,788	(128)	—	(344)	—	—	5,316	(117)	(6)
Mortgage servicing rights (residential) (7)	12,738	(1,870)	—	1,547	—	—	12,415	214	(6)
Net derivative assets and liabilities:									
Interest rate contracts	293	1,132	—	(1,137)	—	—	288	97	
Commodity contracts	1	7	—	6	(2)	—	12	10	
Equity contracts	(84)	116	—	(82)	(13)	(48)	(111)	74	
Foreign exchange contracts	—	—	—	—	—	—	—	—	
Credit contracts	(189)	19	—	167	—	—	(3)	10	
Other derivative contracts	(44)	(15)	—	1	—	—	(58)	(15)	
Total derivative contracts	(23)	1,259	—	(1,045)	(15)	(48)	128	176	(8)
Other assets	2,512	456	—	97	—	—	3,065	457	(5)
Short sale liabilities	(6)	—	—	6	—	—	—	—	(3)
Other liabilities	(28)	(13)	—	11	—	—	(30)	—	(6)

(1) See Table 17.9 for detail.
(2) Represents only net gains (losses) that are due to changes in economic conditions and management's estimates of fair value and excludes changes due to the collection/realization of cash flows over time.
(3) Included in net gains (losses) from trading activities and other noninterest income in the income statement.
(4) Included in net gains (losses) from debt securities in the income statement.
(5) Included in net gains (losses) from equity investments in the income statement.
(6) Included in mortgage banking and other noninterest income in the income statement.
(7) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).
(8) Included in mortgage banking, trading activities, equity investments and other noninterest income in the income statement.

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Table 17.9 presents gross purchases, sales, issuances and settlements related to the changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2015.

Table 17.9: Gross Purchases, Sales, Issuances and Settlements – Level 3 – 2015

(in millions)	Purchases	Sales	Issuances	Settlements	Net
Year ended December 31, 2015					
Trading assets:					
Securities of U.S. states and political subdivisions	$ 4	(2)	—	(1)	1
Collateralized loan obligations	1,093	(1,203)	—	—	(110)
Corporate debt securities	45	(45)	—	—	—
Mortgage-backed securities	—	(1)	—	—	(1)
Asset-backed securities	—	(5)	—	(9)	(14)
Equity securities	—	—	—	(11)	(11)
Total trading securities	1,142	(1,256)	—	(21)	(135)
Other trading assets	4	(27)	—	(1)	(24)
Total trading assets	1,146	(1,283)	—	(22)	(159)
Available-for-sale securities:					
Securities of U.S. states and political subdivisions	—	(65)	555	(1,181)	(691)
Mortgage-backed securities:					
Residential	—	(22)	—	—	(22)
Commercial	—	(8)	—	(22)	(30)
Total mortgage-backed securities	—	(30)	—	(22)	(52)
Corporate debt securities	200	(11)	—	(10)	179
Collateralized loan and other debt obligations	109	(325)	—	(355)	(571)
Asset-backed securities:					
Automobile loans and leases	—	—	—	(264)	(264)
Home equity loans	—	—	—	—	—
Other asset-backed securities	141	(1)	274	(593)	(179)
Total asset-backed securities	141	(1)	274	(857)	(443)
Total debt securities	450	(432)	829	(2,425)	(1,578)
Marketable equity securities:					
Perpetual preferred securities	—	—	—	(24)	(24)
Other marketable equity securities	—	—	—	—	—
Total marketable equity securities	—	—	—	(24)	(24)
Total available-for-sale securities	450	(432)	829	(2,449)	(1,602)
Mortgages held for sale	202	(1,605)	777	(351)	(977)
Loans	72	—	379	(795)	(344)
Mortgage servicing rights (residential) (1)	—	(3)	1,556	(6)	1,547
Net derivative assets and liabilities:					
Interest rate contracts	—	—	—	(1,137)	(1,137)
Commodity contracts	—	—	—	6	6
Equity contracts	15	(103)	—	6	(82)
Foreign exchange contracts	—	—	—	—	—
Credit contracts	12	(3)	—	158	167
Other derivative contracts	—	—	—	1	1
Total derivative contracts	27	(106)	—	(966)	(1,045)
Other assets	97	—	—	—	97
Short sale liabilities	21	(15)	—	—	6
Other liabilities	—	—	—	11	11

(1) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).

Table 17.10 and Table 17.11 provide quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of substantially all of our Level 3 assets and liabilities measured at fair value on a recurring basis for which we use an internal model.

The significant unobservable inputs for Level 3 assets and liabilities that are valued using fair values obtained from third party vendors are not included in the table, as the specific inputs applied are not provided by the vendor (see discussion regarding vendor-developed valuations within the "Level 3 Asset and Liability Valuation Processes" section previously within this Note). In addition, the table excludes the valuation techniques and significant unobservable inputs for certain classes of Level 3 assets and liabilities measured using an internal model that we consider, both individually and in the aggregate, insignificant relative to our overall Level 3 assets and liabilities. We made this determination based upon an evaluation of each class, which considered the magnitude of the positions, nature of the unobservable inputs and potential for significant changes in fair value due to changes in those inputs.

Table 17.10: Valuation Techniques – Recurring Basis – 2017

($ in millions, except cost to service amounts)	Fair Value Level 3	Valuation Technique(s)	Significant Unobservable Input	Range of Inputs	Weighted Average (1)
December 31, 2017					
Trading and available-for-sale securities:					
Securities of U.S. states and political subdivisions:					
Government, healthcare and other revenue bonds	$ 868	Discounted cash flow	Discount rate	1.7 - 5.8 %	2.7
Other municipal bonds	11	Discounted cash flow	Discount rate	4.7 - 4.9	4.8
	49	Vendor priced			
Collateralized loan and other debt obligations (2)	354	Market comparable pricing	Comparability adjustment	(22.0) - 19.5	3.0
	1,020	Vendor priced			
Asset-backed securities:					
Diversified payment rights (3)	292	Discounted cash flow	Discount rate	2.4 - 3.9	3.1
Other commercial and consumer	248 (4)	Discounted cash flow	Discount rate	3.7 - 5.2	3.9
			Weighted average life	2.0 - 2.3 yrs	2.1
	26	Vendor priced			
Mortgages held for sale (residential)	974	Discounted cash flow	Default rate	0.0 - 7.1 %	1.3
			Discount rate	2.6 - 7.3	5.6
			Loss severity	0.1 - 41.4	19.6
			Prepayment rate	6.5 - 15.9	9.1
	24	Market comparable pricing	Comparability adjustment	(56.3) - (6.3)	(42.7)
Loans	376 (5)	Discounted cash flow	Discount rate	3.1 - 7.5	4.2
			Prepayment rate	8.7 - 100.0	91.9
			Loss severity	0.0 - 33.9	6.6
Mortgage servicing rights (residential)	13,625	Discounted cash flow	Cost to service per loan (6)	$ 78 - 587	143
			Discount rate	6.6 - 12.9 %	6.9
			Prepayment rate (7)	9.7 - 20.5	10.5
Net derivative assets and (liabilities):					
Interest rate contracts	54	Discounted cash flow	Default rate	0.0 - 5.0	2.1
			Loss severity	50.0 - 50.0	50.0
			Prepayment rate	2.8 - 12.5	10.5
Interest rate contracts: derivative loan commitments	17	Discounted cash flow	Fall-out factor	1.0 - 99.0	15.2
			Initial-value servicing	(59.9) - 101.1 bps	2.7
Equity contracts	102	Discounted cash flow	Conversion factor	(9.7) - 0.0 %	(7.6)
			Weighted average life	0.5 - 3.0 yrs	1.6
	(613)	Option model	Correlation factor	(77.0) - 98.0 %	24.2
			Volatility factor	5.7 - 95.5	19.2
Credit contracts	(3)	Market comparable pricing	Comparability adjustment	(29.9) - 17.3	(0.2)
	39	Option model	Credit spread	0.0 - 63.7	1.3
			Loss severity	13.0 - 60.0	50.7
Other assets: nonmarketable equity investments	8	Discounted cash flow	Discount rate	10.0 - 10.0	10.0
			Volatility Factor	0.5 1.9	1.4
	4,813	Market comparable pricing	Comparability adjustment	(21.1) - (5.5)	(15.0)
Insignificant Level 3 assets, net of liabilities	570 (8)				
Total level 3 assets, net of liabilities	$ 22,854 (9)				

(1) Weighted averages are calculated using outstanding unpaid principal balance for cash instruments, such as loans and securities, and notional amounts for derivative instruments.
(2) Includes $1.0 billion of collateralized debt obligations.
(3) Securities backed by specified sources of current and future receivables generated from foreign originators.
(4) A significant portion of the balance consists of investments in asset-backed securities that are revolving in nature, for which the timing of advances and repayments of principal are uncertain.
(5) Consists of reverse mortgage loans.
(6) The high end of the range of inputs is for servicing modified loans. For non-modified loans the range is $78 - $252.
(7) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.
(8) Represents the aggregate amount of Level 3 assets and liabilities measured at fair value on a recurring basis that are individually and in the aggregate insignificant. The amount includes corporate debt securities, mortgage-backed securities, other trading assets, other liabilities and certain net derivative assets and liabilities, such as commodity contracts, foreign exchange contracts, and other derivative contracts.
(9) Consists of total Level 3 assets of $24.9 billion and total Level 3 liabilities of $2.0 billion, before netting of derivative balances.

Table 17.11: Valuation Techniques – Recurring Basis – 2016

($ in millions, except cost to service amounts)	Fair Value Level 3		Valuation Technique(s)	Significant Unobservable Input	Range of Inputs		Weighted Average (1)
December 31, 2016							
Trading and available-for-sale securities:							
Securities of U.S. states and political subdivisions:							
Government, healthcare and other revenue bonds	$ 906		Discounted cash flow	Discount rate	1.1 - 5.6	%	2.0
Other municipal bonds	29		Discounted cash flow	Discount rate	3.7 - 4.9		4.5
				Weighted average life	3.6 - 3.6	yrs	3.6
	208		Vendor priced				
Collateralized loan and other debt obligations (2)	309		Market comparable pricing	Comparability adjustment	(15.5) - 20.3	%	2.9
	879		Vendor priced				
Asset-backed securities:							
Diversified payment rights (3)	443		Discounted cash flow	Discount rate	1.9 - 4.8		3.3
Other commercial and consumer	492	(4)	Discounted cash flow	Discount rate	3.0 - 4.6		3.9
				Weighted average life	0.8 - 4.2	yrs	2.9
	27		Vendor priced				
Mortgages held for sale (residential)	955		Discounted cash flow	Default rate	0.5 - 7.9	%	1.9
				Discount rate	1.1 - 6.9		5.1
				Loss severity	0.1 - 42.5		26.9
				Prepayment rate	6.3 - 17.1		10.0
	30		Market comparable pricing	Comparability adjustment	(53.3) - 0.0		(37.8)
Loans	758	(5)	Discounted cash flow	Discount rate	0.0 - 3.9		0.6
				Prepayment rate	0.4 - 100.0		83.7
				Utilization rate	0.0 - 0.8		0.1
Mortgage servicing rights (residential)	12,959		Discounted cash flow	Cost to service per loan (6)	$ 79 - 598		155
				Discount rate	6.5 - 18.4	%	6.8
				Prepayment rate (7)	9.4 - 20.6		10.3
Net derivative assets and (liabilities):							
Interest rate contracts	127		Discounted cash flow	Default rate	0.1 - 6.8		2.1
				Loss severity	50.0 - 50.0		50.0
				Prepayment rate	2.8 - 12.5		9.6
Interest rate contracts: derivative loan commitments	(6)		Discounted cash flow	Fall-out factor	1.0 - 99.0		15.0
				Initial-value servicing	(23.0) - 131.2	bps	56.8
Equity contracts	79		Discounted cash flow	Conversion factor	(10.6) - 0.0	%	(7.9)
				Weighted average life	1.0 - 3.0	yrs	2.0
	(346)		Option model	Correlation factor	(65.0) - 98.5	%	39.9
				Volatility factor	6.5 - 100.0		20.7
Credit contracts	(28)		Market comparable pricing	Comparability adjustment	(27.7) - 21.3		0.02
	105		Option model	Credit spread	0.0 - 11.6		1.2
				Loss severity	12.0 - 60.0		50.4
Other assets: nonmarketable equity investments	21		Discounted cash flow	Discount rate	5.0 - 10.3		8.7
				Volatility Factor	0.3 - 2.4		1.1
	3,238		Market comparable pricing	Comparability adjustment	(22.1) - (5.5)		(16.4)
Insignificant Level 3 assets, net of liabilities	570	(8)					
Total level 3 assets, net of liabilities	$ 21,755	(9)					

(1) Weighted averages are calculated using outstanding unpaid principal balance for cash instruments such as loans and securities, and notional amounts for derivative instruments.
(2) Includes $847 million of collateralized debt obligations.
(3) Securities backed by specified sources of current and future receivables generated from foreign originators.
(4) A significant portion of the balance consists of investments in asset-backed securities that are revolving in nature, for which the timing of advances and repayments of principal are uncertain.
(5) Consists of reverse mortgage loans.
(6) The high end of the range of inputs is for servicing modified loans. For non-modified loans the range is $79 - $293.
(7) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.
(8) Represents the aggregate amount of Level 3 assets and liabilities measured at fair value on a recurring basis that are individually and in the aggregate insignificant. The amount includes corporate debt securities, mortgage-backed securities, other trading assets, other liabilities and certain net derivative assets and liabilities, such as commodity contracts, foreign exchange contracts, and other derivative contracts.
(9) Consists of total Level 3 assets of $23.5 billion and total Level 3 liabilities of $1.7 billion, before netting of derivative balances.

The valuation techniques used for our Level 3 assets and liabilities, as presented in the previous tables, are described as follows:

- Discounted cash flow – Discounted cash flow valuation techniques generally consist of developing an estimate of future cash flows that are expected to occur over the life of an instrument and then discounting those cash flows at a rate of return that results in the fair value amount.
- Market comparable pricing – Market comparable pricing valuation techniques are used to determine the fair value of certain instruments by incorporating known inputs, such as recent transaction prices, pending transactions, or prices of other similar investments that require significant adjustment to reflect differences in instrument characteristics.
- Option model – Option model valuation techniques are generally used for instruments in which the holder has a contingent right or obligation based on the occurrence of a future event, such as the price of a referenced asset going above or below a predetermined strike price. Option models estimate the likelihood of the specified event occurring by incorporating assumptions such as volatility estimates, price of the underlying instrument and expected rate of return.
- Vendor-priced – Prices obtained from third party pricing vendors or brokers that are used to record the fair value of the asset or liability for which the related valuation technique and significant unobservable inputs are not provided.

Significant unobservable inputs presented in the previous tables are those we consider significant to the fair value of the Level 3 asset or liability. We consider unobservable inputs to be significant if by their exclusion the fair value of the Level 3 asset or liability would be impacted by a predetermined percentage change. We also consider qualitative factors, such as nature of the instrument, type of valuation technique used, and the significance of the unobservable inputs relative to other inputs used within the valuation. Following is a description of the significant unobservable inputs provided in the table.

- Comparability adjustment – is an adjustment made to observed market data, such as a transaction price in order to reflect dissimilarities in underlying collateral, issuer, rating, or other factors used within a market valuation approach, expressed as a percentage of an observed price.
- Conversion Factor – is the risk-adjusted rate in which a particular instrument may be exchanged for another instrument upon settlement, expressed as a percentage change from a specified rate.
- Correlation factor – is the likelihood of one instrument changing in price relative to another based on an established relationship expressed as a percentage of relative change in price over a period over time.
- Cost to service – is the expected cost per loan of servicing a portfolio of loans, which includes estimates for unreimbursed expenses (including delinquency and foreclosure costs) that may occur as a result of servicing such loan portfolios.
- Credit spread – is the portion of the interest rate in excess of a benchmark interest rate, such as Overnight Index Swap (OIS), LIBOR or U.S. Treasury rates, that when applied to an investment captures changes in the obligor's creditworthiness.
- Default rate – is an estimate of the likelihood of not collecting contractual amounts owed expressed as a constant default rate (CDR).
- Discount rate – is a rate of return used to calculate the present value of the future expected cash flow to arrive at the fair value of an instrument. The discount rate consists of a benchmark rate component and a risk premium component. The benchmark rate component, for example, OIS, LIBOR or U.S. Treasury rates, is generally observable within the market and is necessary to appropriately reflect the time value of money. The risk premium component reflects the amount of compensation market participants require due to the uncertainty inherent in the instruments' cash flows resulting from risks such as credit and liquidity.
- Fall-out factor – is the expected percentage of loans associated with our interest rate lock commitment portfolio that are likely of not funding.
- Initial-value servicing – is the estimated value of the underlying loan, including the value attributable to the embedded servicing right, expressed in basis points of outstanding unpaid principal balance.
- Loss severity – is the estimated percentage of contractual cash flows lost in the event of a default.
- Prepayment rate – is the estimated rate at which forecasted prepayments of principal of the related loan or debt instrument are expected to occur, expressed as a constant prepayment rate (CPR).
- Utilization rate – is the estimated rate in which incremental portions of existing reverse mortgage credit lines are expected to be drawn by borrowers, expressed as an annualized rate.
- Volatility factor – is the extent of change in price an item is estimated to fluctuate over a specified period of time expressed as a percentage of relative change in price over a period over time.
- Weighted average life – is the weighted average number of years an investment is expected to remain outstanding based on its expected cash flows reflecting the estimated date the issuer will call or extend the maturity of the instrument or otherwise reflecting an estimate of the timing of an instrument's cash flows whose timing is not contractually fixed.

Significant Recurring Level 3 Fair Value Asset and Liability Input Sensitivity

We generally use discounted cash flow or similar internal modeling techniques to determine the fair value of our Level 3 assets and liabilities. Use of these techniques requires determination of relevant inputs and assumptions, some of which represent significant unobservable inputs as indicated in the preceding tables. Accordingly, changes in these unobservable inputs may have a significant impact on fair value.

Certain of these unobservable inputs will (in isolation) have a directionally consistent impact on the fair value of the instrument for a given change in that input. Alternatively, the fair value of the instrument may move in an opposite direction for a given change in another input. Where multiple inputs are used within the valuation technique of an asset or liability, a change in one input in a certain direction may be offset by an opposite change in another input having a potentially muted impact to the overall fair value of that particular instrument. Additionally, a change in one unobservable input may result in a change to another unobservable input (that is, changes in certain inputs are interrelated to one another), which may counteract or magnify the fair value impact.

SECURITIES, LOANS, MORTGAGES HELD FOR SALE and NONMARKETABLE EQUITY INVESTMENTS The fair values of predominantly all Level 3 trading securities, mortgages held for sale, loans, other nonmarketable equity investments, and available-for-sale securities have consistent inputs, valuation techniques and correlation to changes in underlying inputs. The internal models used to determine fair value for these Level 3 instruments use certain significant unobservable inputs within a discounted cash flow or market comparable pricing valuation technique. Such inputs include discount rate, prepayment rate, default rate, loss severity, utilization rate, comparability adjustment and weighted average life.

These Level 3 assets would decrease (increase) in value based upon an increase (decrease) in discount rate, default rate, loss severity, or weighted average life inputs and would generally decrease (increase) in value based upon an increase (decrease) in prepayment rate. Conversely, the fair value of these Level 3 assets would generally increase (decrease) in value if the utilization rate input were to increase (decrease).

Generally, a change in the assumption used for default rate is accompanied by a directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. The comparability adjustment input may have a positive or negative impact on fair value depending on the change in fair value the comparability adjustment references. Unobservable inputs for comparability adjustment, loss severity, utilization rate and weighted average life do not increase or decrease based on movements in the other significant unobservable inputs for these Level 3 assets.

DERIVATIVE INSTRUMENTS Level 3 derivative instruments are valued using market comparable pricing, option pricing and discounted cash flow valuation techniques. We utilize certain unobservable inputs within these techniques to determine the fair value of the Level 3 derivative instruments. The significant unobservable inputs consist of credit spread, a comparability adjustment, prepayment rate, default rate, loss severity, initial-value servicing, fall-out factor, volatility factor, weighted average life, conversion factor, and correlation factor.

Level 3 derivative assets (liabilities) where we are long the underlying would decrease (increase) in value upon an increase (decrease) in default rate, fall-out factor, credit spread, conversion factor, or loss severity inputs. Conversely, Level 3 derivative assets (liabilities) would generally increase (decrease) in value upon an increase (decrease) in prepayment rate, initial-value servicing, weighted average life, or volatility factor inputs. The inverse of the above relationships would occur for instruments in which we are short the underlying. The correlation factor and comparability adjustment inputs may have a positive or negative impact on the fair value of these derivative instruments depending on the change in value of the item the correlation factor and comparability adjustment is referencing. The correlation factor and comparability adjustment are considered independent from movements in other significant unobservable inputs for derivative instruments.

Generally, for derivative instruments for which we are subject to changes in the value of the underlying referenced instrument, a change in the assumption used for default rate is accompanied by directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. Unobservable inputs for loss severity, fall-out factor, initial-value servicing, weighted average life, conversion factor, and volatility do not increase or decrease based on movements in other significant unobservable inputs for these Level 3 instruments.

MORTGAGE SERVICING RIGHTS We use a discounted cash flow valuation technique to determine the fair value of Level 3 mortgage servicing rights. These models utilize certain significant unobservable inputs including prepayment rate, discount rate and costs to service. An increase in any of these unobservable inputs will reduce the fair value of the mortgage servicing rights and alternatively, a decrease in any one of these inputs would result in the mortgage servicing rights increasing in value. Generally, a change in the assumption used for the default rate is accompanied by a directionally similar change in the assumption used for cost to service and a directionally opposite change in the assumption used for prepayment. The sensitivity of our residential MSRs is discussed further in Note 8 (Securitizations and Variable Interest Entities).

Assets and Liabilities Recorded at Fair Value on a Nonrecurring Basis

We may be required, from time to time, to measure certain assets at fair value on a nonrecurring basis in accordance with GAAP. These adjustments to fair value usually result from application of LOCOM accounting or write-downs of individual assets. Table 17.12 provides the fair value hierarchy and carrying amount of all assets that were still held as of December 31, 2017, and 2016, and for which a nonrecurring fair value adjustment was recorded during the years then ended.

Table 17.12: Fair Value on a Nonrecurring Basis

		December 31, 2017				December 31, 2016			
(in millions)		**Level 1**	**Level 2**	**Level 3**	**Total**	Level 1	Level 2	Level 3	Total
Mortgages held for sale (LOCOM) (1)	**$**	**—**	**1,646**	**1,333**	**2,979**	—	2,312	1,350	3,662
Loans held for sale		**—**	**108**	**—**	**108**	—	8	—	8
Loans:									
Commercial		**—**	**374**	**—**	**374**	—	464	—	464
Consumer		**—**	**502**	**10**	**512**	—	822	7	829
Total loans (2)		**—**	**876**	**10**	**886**	—	1,286	7	1,293
Other assets - excluding nonmarketable equity investments at NAV (3)		**—**	**177**	**297**	**474**	—	233	412	645
Total included in the fair value hierarchy	**$**	**—**	**2,807**	**1,640**	**4,447**	—	3,839	1,769	5,608
Other assets - nonmarketable equity investments at NAV (4)					**6**				13
Total assets at fair value on a nonrecurring basis					**$ 4,453**				5,621

(1) Consists of commercial mortgages and residential real estate 1-4 family first mortgage loans.
(2) Represents the carrying value of loans for which nonrecurring adjustments are based on the appraised value of the collateral.
(3) Includes the fair value of foreclosed real estate, other collateral owned, operating lease assets and nonmarketable equity investments.
(4) Consists of certain nonmarketable equity investments that are measured at fair value on a nonrecurring basis using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

Table 17.13 presents the increase (decrease) in value of certain assets held at the end of the respective reporting periods presented for which a nonrecurring fair value adjustment was recognized during the periods presented.

Table 17.13: Change in Value of Assets with Nonrecurring Fair Value Adjustment

		Year ended December 31,	
(in millions)		**2017**	2016
Mortgages held for sale (LOCOM)	**$**	**10**	1
Loans held for sale		**(2)**	—
Loans:			
Commercial		**(335)**	(913)
Consumer		**(424)**	(717)
Total loans (1)		**(759)**	(1,630)
Other assets (2)		**(299)**	(438)
Total	**$**	**(1,050)**	(2,067)

(1) Represents write-downs of loans based on the appraised value of the collateral.
(2) Includes the losses on foreclosed real estate and other collateral owned that were measured at fair value subsequent to their initial classification as foreclosed assets. Also includes impairment losses on nonmarketable equity investments.

Table 17.14 provides quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of substantially all of our Level 3 assets that are measured at fair value on a nonrecurring basis using an internal model. The table is limited to financial instruments that had nonrecurring fair value adjustments during the periods presented.

We have excluded from the table valuation techniques and significant unobservable inputs for certain classes of Level 3 assets measured using an internal model that we consider, both individually and in the aggregate, insignificant relative to our overall Level 3 nonrecurring measurements. We made this determination based upon an evaluation of each class that considered the magnitude of the positions, nature of the unobservable inputs and potential for significant changes in fair value due to changes in those inputs.

Table 17.14: Valuation Techniques – Nonrecurring Basis

($ in millions)	Fair Value Level 3	Valuation Technique(s) (1)	Significant Unobservable Inputs (1)	Range of inputs	Weighted Average (2)
December 31, 2017					
Residential mortgages held for sale (LOCOM)	**$ 1,333 (3)**	**Discounted cash flow**	**Default rate (4)**	**0.1 – 4.1%**	**1.7%**
			Discount rate	**1.5 – 8.5**	**3.8**
			Loss severity	**0.7 – 52.9**	**2.2**
			Prepayment rate (5)	**5.4 – 100.0**	**50.6**
Other assets: nonmarketable equity investments	**122**	**Discounted cash flow**	**Discount rate**	**5.0 – 10.5**	**10.2**
Insignificant level 3 assets	**185**				
Total	**$ 1,640**				
December 31, 2016					
Residential mortgages held for sale (LOCOM)	$ 1,350 (3)	Discounted cash flow	Default rate (4)	0.2 – 4.3 %	1.9 %
			Discount rate	1.5 – 8.5	3.8
			Loss severity	0.7 – 50.1	2.4
			Prepayment rate (5)	3.0 – 100.0	50.7
Other assets: nonmarketable equity investments	220	Discounted cash flow	Discount rate	4.7 – 9.3	7.3
Insignificant level 3 assets	199				
Total	$ 1,769				

(1) Refer to the narrative following Table 17.11 for a definition of the valuation technique(s) and significant unobservable inputs.
(2) For residential MHFS, weighted averages are calculated using the outstanding unpaid principal balance of the loans.
(3) Consists of approximately $1.3 billion of government insured/guaranteed loans purchased from GNMA-guaranteed mortgage securitizations at both December 31, 2017 and 2016, and $26 million and $33 million of other mortgage loans that are not government insured/guaranteed at December 31, 2017 and 2016, respectively.
(4) Applies only to non-government insured/guaranteed loans.
(5) Includes the impact on prepayment rate of expected defaults for government insured/guaranteed loans, which impact the frequency and timing of early resolution of loans.

Alternative Investments

We hold certain nonmarketable equity investments for which we use NAV per share (or its equivalent) as a practical expedient for fair value measurements, including estimated fair values for investments accounted for under the cost method. The investments consist of private equity funds that invest in equity and debt securities issued by private and publicly-held companies. The fair values of these investments and related unfunded commitments totaled $30 million and $23 million, respectively, at December 31, 2017, and $48 million and $37 million, respectively, at December 31, 2016. The investments do not allow redemptions. We receive distributions as the underlying assets of the funds liquidate, which we expect to occur through 2025.

Fair Value Option

The fair value option is an irrevocable election, generally only permitted upon initial recognition of financial assets or liabilities, to measure eligible financial instruments at fair value with changes in fair value reflected in earnings. We may elect the fair value option to align the measurement model with how the financial assets or liabilities are managed or to reduce complexity or accounting asymmetry. Following is a discussion of the portfolios for which we elected the fair value option.

TRADING ASSETS - LOANS We engage in holding loans for market-making purposes to support the buying and selling demands of our customers. These loans are generally held for a short period of time and managed within parameters of internally approved market risk limits. We have elected to measure and carry them at fair value, which best aligns with our risk management practices. Fair value for these loans is generally determined using readily available market data based on recent transaction prices for similar loans.

MORTGAGES HELD FOR SALE (MHFS) We measure MHFS at fair value for MHFS originations for which an active secondary market and readily available market prices exist to reliably support fair value pricing models used for these loans. Loan origination fees on these loans are recorded when earned, and related direct loan origination costs are recognized when incurred. We also measure at fair value certain of our other interests held related to residential loan sales and securitizations. We believe fair value measurement for MHFS and other interests held, which we hedge with economic hedge derivatives along with our MSRs measured at fair value, reduces certain timing differences and better matches changes in the value of these assets with changes in the value of derivatives used as economic hedges for these assets.

LOANS HELD FOR SALE (LHFS) We elected to measure certain LHFS portfolios at fair value in conjunction with customer accommodation activities, which better aligns the measurement basis of the assets held with our management objectives given the trading nature of these portfolios.

LOANS Loans that we measure at fair value consist predominantly of reverse mortgage loans previously transferred under a GNMA reverse mortgage securitization program accounted for as a secured borrowing. Before the transfer, they were classified as MHFS measured at fair value and, as such, remain carried on our balance sheet under the fair value option.

OTHER FINANCIAL INSTRUMENTS We elected to measure at fair value certain nonmarketable equity securities that are hedged with derivative instruments to better reflect the economics of the transactions. These securities are included in other assets.

Similarly, we may elect fair value option for the assets and liabilities of certain newly consolidated VIEs if our interests, prior to consolidation, are carried at fair value with changes in fair value recorded to earnings. Accordingly, such an election allows us to continue fair value accounting through earnings for those interests and eliminate income statement mismatch otherwise caused by differences in the measurement basis of the consolidated VIEs assets and liabilities.

Table 17.15 reflects differences between the fair value carrying amount of the assets for which we have elected the fair value option and the contractual aggregate unpaid principal amount at maturity.

Table 17.15: Fair Value Option

	December 31, 2017			December 31, 2016		
(in millions)	**Fair value carrying amount**	**Aggregate unpaid principal**	**Fair value carrying amount less aggregate unpaid principal**	Fair value carrying amount	Aggregate unpaid principal	Fair value carrying amount less aggregate unpaid principal
Trading assets - loans:						
Total loans	**$ 1,023**	**1,069**	**(46)**	1,332	1,418	(86)
Nonaccrual loans	**34**	**50**	**(16)**	100	115	(15)
Mortgages held for sale:						
Total loans	**16,116**	**15,827**	**289**	22,042	21,961	81
Nonaccrual loans	**127**	**165**	**(38)**	136	182	(46)
Loans 90 days or more past due and still accruing	**16**	**21**	**(5)**	12	16	(4)
Loans held for sale:						
Total loans	**—**	**6**	**(6)**	—	6	(6)
Nonaccrual loans	**—**	**6**	**(6)**	—	6	(6)
Loans:						
Total loans	**376**	**404**	**(28)**	758	775	(17)
Nonaccrual loans	**253**	**281**	**(28)**	297	318	(21)
Other assets (1)	**4,867**	**N/A**	**N/A**	3,275	N/A	N/A

(1) Consists of nonmarketable equity investments carried at fair value. See Note 7 (Premises, Equipment, Lease Commitments and Other Assets) for more information.

Note 17: Fair Values of Assets and Liabilities *(continued)*

The assets accounted for under the fair value option are initially measured at fair value. Gains and losses from initial measurement and subsequent changes in fair value are recognized in earnings. The changes in fair value related to initial measurement and subsequent changes in fair value included in earnings for these assets measured at fair value are shown in Table 17.16 by income statement line item.

Table 17.16: Fair Value Option – Changes in Fair Value Included in Earnings

										Year ended December 31,
				2017			2016			2015
(in millions)		**Mortgage banking noninterest income**	**Net gains (losses) from trading activities**	**Other noninterest income**	Mortgage banking noninterest income	Net gains (losses) from trading activities	Other noninterest income	Mortgage banking noninterest income	Net gains (losses) from trading activities	Other noninterest income
Trading assets - loans	**$**	**—**	**45**	**2**	—	55	3	—	4	4
Mortgages held for sale		**1,229**	**—**	**—**	1,456	—	—	1,808	—	—
Loans		**—**	**—**	**—**	—	—	(60)	—	—	(122)
Other assets		**—**	**—**	**1,592**	—	—	(12)	—	—	457
Other interests held (1)		**—**	**(9)**	**—**	—	(5)	—	—	(6)	—

(1) Includes retained interests in securitizations.

For performing loans, instrument-specific credit risk gains or losses were derived principally by determining the change in fair value of the loans due to changes in the observable or implied credit spread. Credit spread is the market yield on the loans less the relevant risk-free benchmark interest rate. For nonperforming loans, we attribute all changes in fair value to instrument-specific credit risk. Table 17.17 shows the estimated gains and losses from earnings attributable to instrument-specific credit risk related to assets accounted for under the fair value option.

Table 17.17: Fair Value Option – Gains/Losses Attributable to Instrument-Specific Credit Risk

			Year ended December 31,	
(in millions)		**2017**	2016	2015
Gains (losses) attributable to instrument-specific credit risk:				
Trading assets - loans	**$**	**45**	55	4
Mortgages held for sale		**(12)**	3	29
Total	**$**	**33**	58	33

Disclosures about Fair Value of Financial Instruments

Table 17.18 is a summary of fair value estimates for financial instruments, excluding financial instruments recorded at fair value on a recurring basis, as they are included within Table 17.2 in this Note. The carrying amounts in the following table are recorded on the balance sheet under the indicated captions, except for nonmarketable equity investments, which are included in other assets.

We have not included assets and liabilities that are not financial instruments in our disclosure, such as the value of the long-term relationships with our deposit, credit card and trust customers, amortized MSRs, premises and equipment, goodwill and other intangibles, deferred taxes and other liabilities. The total of the fair value calculations presented does not represent, and should not be construed to represent, the underlying value of the Company.

Table 17.18: Fair Value Estimates for Financial Instruments

		Estimated fair value			
(in millions)	Carrying amount	Level 1	Level 2	Level 3	Total
December 31, 2017					
Financial assets					
Cash and due from banks (1)	**$ 23,367**	**23,367**	**—**	**—**	**23,367**
Federal funds sold, securities purchased under resale agreements and other short-term investments (1)	**272,605**	**193,457**	**79,079**	**69**	**272,605**
Held-to-maturity securities	**139,335**	**44,806**	**93,694**	**485**	**138,985**
Mortgages held for sale (2)	**3,954**	**—**	**2,625**	**1,333**	**3,958**
Loans held for sale	**108**	**—**	**108**	**—**	**108**
Loans, net (3)	**926,273**	**—**	**51,713**	**886,622**	**938,335**
Nonmarketable equity investments (cost method)					
Excluding investments at NAV	**7,136**	**—**	**23**	**7,605**	**7,628**
Total financial assets included in the fair value hierarchy	**1,372,778**	**261,630**	**227,242**	**896,114**	**1,384,986**
Investments at NAV (4)	**27**				**30**
Total financial assets	**$ 1,372,805**				**1,385,016**
Financial liabilities					
Deposits	**$ 1,335,991**	**—**	**1,315,648**	**19,768**	**1,335,416**
Short-term borrowings (1)	**103,256**	**—**	**103,256**	**—**	**103,256**
Long-term debt (5)	**224,981**	**—**	**227,109**	**3,159**	**230,268**
Total financial liabilities	**$ 1,664,228**	**—**	**1,646,013**	**22,927**	**1,668,940**
December 31, 2016					
Financial assets					
Cash and due from banks (1)	$ 20,729	20,729	—	—	20,729
Federal funds sold, securities purchased under resale agreements and other short-term investments (1) (6)	266,038	207,003	58,953	82	266,038
Held to maturity securities	99,583	45,079	51,706	2,370	99,155
Mortgages held for sale (2)	4,267	—	2,927	1,350	4,277
Loans held for sale	80	—	81	—	81
Loans, net (3)	936,358	—	60,245	887,589	947,834
Nonmarketable equity investments (cost method)					
Excluding investments at NAV	8,362	—	18	8,924	8,942
Total financial assets included in the fair value hierarchy	1,335,417	272,811	173,930	900,315	1,347,056
Investments at NAV (4)	35				48
Total financial assets	$ 1,335,452				1,347,104
Financial liabilities					
Deposits	$ 1,306,079	—	1,282,158	23,995	1,306,153
Short-term borrowings (1)	96,781	—	96,781	—	96,781
Long-term debt (5)	255,070	—	245,704	10,075	255,779
Total financial liabilities	$ 1,657,930	—	1,624,643	34,070	1,658,713

(1) Amounts consist of financial instruments for which carrying value approximates fair value.
(2) Excludes MHFS for which we elected the fair value option.
(3) Excludes loans for which the fair value option was elected and also excludes lease financing with a carrying amount of $19.4 billion and $19.3 billion at December 31, 2017 and 2016, respectively.
(4) Consists of certain nonmarketable equity investments for which estimated fair values are determined using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.
(5) Excludes capital lease obligations under capital leases of $39 million and $7 million at December 31, 2017 and 2016, respectively.
(6) The fair value classification level of certain interest-earning deposits have been reclassified to conform with the current period end classification.

Loan commitments, standby letters of credit and commercial and similar letters of credit are not included in Table 17.18. A reasonable estimate of the fair value of these instruments is the carrying value of deferred fees plus the allowance for unfunded credit commitments, which totaled $1.0 billion and $1.2 billion at December 31, 2017 and 2016, respectively.

Note 18: Preferred Stock

We are authorized to issue 20 million shares of preferred stock and 4 million shares of preference stock, both without par value. Preferred shares outstanding rank senior to common shares both as to dividends and liquidation preference but have no general voting rights. We have not issued any preference shares under this authorization. If issued, preference shares would be limited to one vote per share. Our total authorized, issued and outstanding preferred stock is presented in the following two tables along with the Employee Stock Ownership Plan (ESOP) Cumulative Convertible Preferred Stock.

Table 18.1: Preferred Stock Shares

	December 31, 2017		December 31, 2016	
	Liquidation preference per share	Shares authorized and designated	Liquidation preference per share	Shares authorized and designated
DEP Shares				
Dividend Equalization Preferred Shares (DEP)	$ 10	97,000	$ 10	97,000
Series H				
Floating Class A Preferred Stock (1)	—	—	20,000	50,000
Series I				
Floating Class A Preferred Stock	100,000	25,010	100,000	25,010
Series J				
8.00% Non-Cumulative Perpetual Class A Preferred Stock	1,000	2,300,000	1,000	2,300,000
Series K				
7.98% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	1,000	3,500,000	1,000	3,500,000
Series L				
7.50% Non-Cumulative Perpetual Convertible Class A Preferred Stock	1,000	4,025,000	1,000	4,025,000
Series N				
5.20% Non-Cumulative Perpetual Class A Preferred Stock	25,000	30,000	25,000	30,000
Series O				
5.125% Non-Cumulative Perpetual Class A Preferred Stock	25,000	27,600	25,000	27,600
Series P				
5.25% Non-Cumulative Perpetual Class A Preferred Stock	25,000	26,400	25,000	26,400
Series Q				
5.85% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	69,000	25,000	69,000
Series R				
6.625% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	34,500	25,000	34,500
Series S				
5.90% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	80,000	25,000	80,000
Series T				
6.00% Non-Cumulative Perpetual Class A Preferred Stock	25,000	32,200	25,000	32,200
Series U				
5.875% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	80,000	25,000	80,000
Series V				
6.00% Non-Cumulative Perpetual Class A Preferred Stock	25,000	40,000	25,000	40,000
Series W				
5.70% Non-Cumulative Perpetual Class A Preferred Stock	25,000	40,000	25,000	40,000
Series X				
5.50% Non-Cumulative Perpetual Class A Preferred Stock	25,000	46,000	25,000	46,000
Series Y				
5.625% Non-Cumulative Perpetual Class A Preferred Stock	25,000	27,600	—	—
ESOP				
Cumulative Convertible Preferred Stock (2)	—	1,556,104	—	1,439,181
Total		12,036,414		11,941,891

(1) On January 26, 2017, we filed with the Delaware Secretary of State a Certificate Eliminating the Certificate of Designations with respect to the Series H preferred Stock.
(2) See the ESOP Cumulative Convertible Preferred Stock section of this Note for additional information about the liquidation preference for the ESOP Cumulative Preferred Stock.

Table 18.2: Preferred Stock – Shares Issued and Carrying Value

	December 31, 2017				December 31, 2016			
(in millions, except shares)	Shares issued and outstanding	Liquidation preference value	Carrying value	Discount	Shares issued and outstanding	Liquidation preference value	Carrying value	Discount
DEP Shares								
Dividend Equalization Preferred Shares (DEP)	96,546	$ —	—	—	96,546	$ —	—	—
Series I (1)								
Floating Class A Preferred Stock	25,010	2,501	2,501	—	25,010	2,501	2,501	—
Series J (1)								
8.00% Non-Cumulative Perpetual Class A Preferred Stock	2,150,375	2,150	1,995	155	2,150,375	2,150	1,995	155
Series K (1)								
7.98% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	3,352,000	3,352	2,876	476	3,352,000	3,352	2,876	476
Series L (1)								
7.50% Non-Cumulative Perpetual Convertible Class A Preferred Stock	3,968,000	3,968	3,200	768	3,968,000	3,968	3,200	768
Series N (1)								
5.20% Non-Cumulative Perpetual Class A Preferred Stock	30,000	750	750	—	30,000	750	750	—
Series O (1)								
5.125% Non-Cumulative Perpetual Class A Preferred Stock	26,000	650	650	—	26,000	650	650	—
Series P (1)								
5.25% Non-Cumulative Perpetual Class A Preferred Stock	25,000	625	625	—	25,000	625	625	—
Series Q (1)								
5.85% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	69,000	1,725	1,725	—	69,000	1,725	1,725	—
Series R (1)								
6.625% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	33,600	840	840	—	33,600	840	840	—
Series S (1)								
5.90% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	80,000	2,000	2,000	—	80,000	2,000	2,000	—
Series T (1)								
6.00% Non-Cumulative Perpetual Class A Preferred Stock	32,000	800	800	—	32,000	800	800	—
Series U (1)								
5.875% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	80,000	2,000	2,000	—	80,000	2,000	2,000	—
Series V (1)								
6.00% Non-Cumulative Perpetual Class A Preferred Stock	40,000	1,000	1,000	—	40,000	1,000	1,000	—
Series W (1)								
5.70% Non-Cumulative Perpetual Class A Preferred Stock	40,000	1,000	1,000	—	40,000	1,000	1,000	—
Series X (1)								
5.50% Non-Cumulative Perpetual Class A Preferred Stock	46,000	1,150	1,150	—	46,000	1,150	1,150	—
Series Y (1)								
5.625% Non-Cumulative Perpetual Class A Preferred Stock	27,600	690	690	—	—	—	—	—
ESOP								
Cumulative Convertible Preferred Stock	1,556,104	1,556	1,556	—	1,439,181	1,439	1,439	—
Total	11,677,235	$ 26,757	25,358	1,399	11,532,712	$ 25,950	24,551	1,399

(1) Preferred shares qualify as Tier 1 capital.

In April 2017, we issued 27.6 million Depositary Shares, each representing a 1/1,000th interest in a share of Non-Cumulative Perpetual Class A Preferred Stock, Series Y, for an aggregate public offering price of $690 million.

See Note 8 (Securitizations and Variable Interest Entities) for additional information on our trust preferred securities.

ESOP CUMULATIVE CONVERTIBLE PREFERRED STOCK All shares of our ESOP Cumulative Convertible Preferred Stock (ESOP Preferred Stock) were issued to a trustee acting on behalf of the Wells Fargo & Company 401(k) Plan (the 401(k) Plan). Dividends on the ESOP Preferred Stock are cumulative from the date of initial issuance and are payable quarterly at annual rates based upon the year of issuance. Each share of ESOP Preferred Stock released from the unallocated reserve of the 401(k) Plan is converted into shares of our common stock based on the stated value of the ESOP Preferred Stock and the then current market price of our common stock. The ESOP Preferred Stock is also convertible at the option of the holder at any time, unless previously redeemed. We have the option to redeem the ESOP Preferred Stock at any time, in whole or in part, at a redemption price per share equal to the higher of (a) $1,000 per share plus accrued and unpaid dividends or (b) the fair market value, as defined in the Certificates of Designation for the ESOP Preferred Stock.

Table 18.3: ESOP Preferred Stock

	Shares issued and outstanding		Carrying value		Adjustable dividend rate	
(in millions, except shares)	**Dec 31, 2017**	Dec 31, 2016	**Dec 31, 2017**	Dec 31, 2016	Minimum	Maximum
ESOP Preferred Stock						
$1,000 liquidation preference per share						
2017	**273,210**	—	**$ 273**	—	7.00%	8.00
2016	**322,826**	358,528	**323**	358	9.30	10.30
2015	**187,436**	200,820	**187**	201	8.90	9.90
2014	**237,151**	255,413	**237**	255	8.70	9.70
2013	**201,948**	222,558	**202**	223	8.50	9.50
2012	**128,634**	144,072	**129**	144	10.00	11.00
2011	**129,296**	149,301	**129**	149	9.00	10.00
2010	**75,603**	90,775	**76**	91	9.50	10.50
2008	**—**	17,714	**—**	18	10.50	11.50
Total ESOP Preferred Stock (1)	**1,556,104**	1,439,181	**$ 1,556**	1,439		
Unearned ESOP shares (2)			**$ (1,678)**	(1,565)		

(1) At December 31, 2017 and 2016, additional paid-in capital included $122 million and $126 million, respectively, related to ESOP preferred stock.
(2) We recorded a corresponding charge to unearned ESOP shares in connection with the issuance of the ESOP Preferred Stock. The unearned ESOP shares are reduced as shares of the ESOP Preferred Stock are committed to be released.

Note 19: Common Stock and Stock Plans

Common Stock

Table 19.1 presents our reserved, issued and authorized shares of common stock at December 31, 2017.

Table 19.1: Common Stock Shares

	Number of shares
Dividend reinvestment and common stock purchase plans	10,973,760
Director plans	572,270
Stock plans (1)	459,744,943
Convertible securities and warrants	89,163,322
Total shares reserved	560,454,295
Shares issued	5,481,811,474
Shares not reserved or issued	2,957,734,231
Total shares authorized	9,000,000,000

(1) Includes employee options, restricted shares and restricted share rights, 401(k) profit sharing and compensation deferral plans.

At December 31, 2017, we had 23,327,854 warrants outstanding and exercisable to purchase shares of our common stock with an exercise price of $33.701 per share, expiring on October 28, 2018. The terms of the warrants require that the number of shares entitled to be purchased upon exercise of a warrant be adjusted under certain circumstances. At December 31, 2017, each warrant was exercisable to purchase approximately 1.01 shares of our common stock. We purchased none of these warrants in 2017 or 2016. Holders exercised 9,774,052 and 1,714,726 warrants to purchase shares of our common stock in 2017 and 2016, respectively. These warrants were issued in connection with our participation in the Troubled Asset Relief Program (TARP) Capital Purchase Program (CPP).

Dividend Reinvestment and Common Stock Purchase Plans

Participants in our dividend reinvestment and common stock direct purchase plans may purchase shares of our common stock at fair market value by reinvesting dividends and/or making optional cash payments, under the plan's terms.

Employee Stock Plans

We offer stock-based employee compensation plans as described below. For information on our accounting for stock-based compensation plans, see Note 1 (Summary of Significant Accounting Policies).

LONG-TERM INCENTIVE COMPENSATION PLANS Our Long-Term Incentive Compensation Plan (LTICP) provides for awards of incentive and nonqualified stock options, stock appreciation rights, restricted shares, restricted stock rights (RSRs), performance share awards (PSAs), performance units and stock awards with or without restrictions.

Beginning in 2010, we granted RSRs and performance shares as our primary long-term incentive awards instead of stock options. Holders of RSRs are entitled to the related shares of common stock at no cost generally vesting over three to five years after the RSRs were granted. Subject to compliance with applicable laws, rules and regulations, RSRs generally continue to vest and are distributed after retirement according to the original vesting schedule. Except for retirement and other limited circumstances, RSRs are canceled when employment ends.

Holders of each vested PSA are entitled to the related shares of common stock at no cost. Subject to compliance with applicable laws, rules, and regulations, PSAs continue to vest and are distributed after retirement according to the original vesting schedule subject to satisfying the performance criteria and other vesting conditions.

Holders of RSRs and PSAs may be entitled to receive additional RSRs and PSAs (dividend equivalents) or cash payments equal to the cash dividends that would have been paid had the RSRs or PSAs been issued and outstanding shares of common stock. RSRs and PSAs granted as dividend equivalents are subject to the same vesting schedule and conditions as the underlying award.

Stock options must have an exercise price at or above fair market value (as defined in the plan) of the stock at the date of grant (except for substitute or replacement options granted in connection with mergers or other acquisitions) and a term of no more than 10 years. Options generally become exercisable over three years beginning on the first anniversary of the date of grant. Except as otherwise permitted under the plan, if employment is ended for reasons other than retirement, permanent disability or death, the option exercise period is reduced or the options are canceled.

Compensation expense for most of our RSRs, and PSAs granted prior to 2013 is based on the quoted market price of the related stock at the grant date; beginning in 2013 certain RSRs and all PSAs granted include discretionary conditions that can result in forfeiture and are subject to variable accounting. For these awards, the associated compensation expense fluctuates with changes in our stock price. Table 19.2 summarizes the major components of stock incentive compensation expense and the related recognized tax benefit.

Table 19.2: Stock Incentive Compensation Expense

	Year ended December 31,		
(in millions)	**2017**	2016	2015
RSRs	**$ 743**	692	675
Performance shares	**112**	87	169
Stock options	**(6)**	—	—
Total stock incentive compensation expense (1)	**$ 849**	779	844
Related recognized tax benefit	**$ 320**	294	318

(1) Amount for the year-ended December 31, 2017, is net of $26 million related to clawback credits taken against a prior PSA awarded under our LTICP.

For various acquisitions and mergers, we converted employee and director stock options of acquired or merged companies into stock options to purchase our common stock based on the terms of the original stock option plan and the agreed-upon exchange ratio. In addition, we converted restricted stock awards into awards that entitle holders to our stock after the vesting conditions are met. Holders receive cash dividends on outstanding awards if provided in the original award.

The total number of shares of common stock available for grant under the plans at December 31, 2017, was 147 million.

Director Awards

Beginning in 2011, we granted only common stock awards under the LTICP to non-employee directors elected or re-elected at the annual meeting of stockholders and prorated awards to directors who join the Board at any other time. Stock awards vest immediately. Options also were granted to directors prior to 2011 and can be exercised after 12 months through the tenth anniversary of the grant date.

Restricted Share Rights

A summary of the status of our RSRs and restricted share awards at December 31, 2017, and changes during 2017 is presented in Table 19.3.

Table 19.3: Restricted Share Rights

	Number	Weighted-average grant-date fair value
Nonvested at January 1, 2017	35,678,586	$ 46.40
Granted	15,082,229	57.54
Vested	(14,777,208)	46.61
Canceled or forfeited	(1,089,231)	51.99
Nonvested at December 31, 2017	34,894,376	50.95

The weighted-average grant date fair value of RSRs granted during 2016 and 2015 was $48.31 and $55.34, respectively.

At December 31, 2017, there was $781 million of total unrecognized compensation cost related to nonvested RSRs. The cost is expected to be recognized over a weighted-average period of 2.4 years. The total fair value of RSRs that vested during 2017, 2016 and 2015 was $865 million, $1.1 billion and $1.4 billion, respectively.

Performance Share Awards

Holders of PSAs are entitled to the related shares of common stock at no cost subject to the Company's achievement of specified performance criteria over a three-year period. PSAs are granted at a target number; based on the Company's performance, the number of awards that vest can be adjusted downward to zero and upward to a maximum of either 125% or 150% of target. The awards vest in the quarter after the end of the performance period. For PSAs whose performance period ended December 31, 2017, the determination of the number of performance shares that will vest will occur in first quarter of 2018 after review of the Company's performance by the Human Resources Committee of the Board of Directors. Beginning in 2013, PSAs granted include discretionary conditions that can result in forfeiture and are subject to variable accounting. For these awards, the associated compensation expense fluctuates with changes in our stock price and the estimated outcome of meeting the performance conditions. The total expense that will be recognized on these awards cannot be finalized until the determination of the awards that will vest.

A summary of the status of our PSAs at December 31, 2017, and changes during 2017 is in Table 19.4, based on the performance adjustments recognized as of December 2017.

Table 19.4: Performance Share Awards

	Number	Weighted-average grant-date fair value (1)
Nonvested at January 1, 2017	5,528,405	$ 43.99
Granted	2,073,942	57.14
Vested	(1,993,598)	46.63
Canceled or forfeited	(116,645)	52.97
Nonvested at December 31, 2017	5,492,104	47.81

(1) Reflects approval date fair value for grants subject to variable accounting.

The weighted-average grant date fair value of performance awards granted during 2016 and 2015 was $44.73 and $45.52, respectively.

At December 31, 2017, there was $43 million of total unrecognized compensation cost related to nonvested performance awards. The cost is expected to be recognized over a weighted-average period of 1.7 years. The total fair value of PSAs that vested during 2017, 2016 and 2015 was $117 million, $220 million, and $299 million, respectively.

Stock Options

Table 19.5 summarizes stock option activity and related information for the stock plans. Options assumed in mergers are included in the activity and related information for Incentive Compensation Plans if originally issued under an employee plan, and in the activity and related information for Director Awards if originally issued under a director plan.

Table 19.5: Stock Option Activity

	Number	Weighted-average exercise price	Weighted-average remaining contractual term (in yrs.)	Aggregate intrinsic value (in millions)
Incentive compensation plans				
Options outstanding as of December 31, 2016	44,266,998	$ 34.62		
Canceled or forfeited	(2,550,555)	106.71		
Exercised	(21,537,264)	27.79		
Options exercisable and outstanding as of December 31, 2017	20,179,179	32.80	0.8	$ 777
Director awards				
Options outstanding as of December 31, 2016	199,820	32.06		
Exercised	(94,920)	34.48		
Options exercisable and outstanding as of December 31, 2017	104,900	29.87	0.3	3

The total intrinsic value to option holders, which is the stock market value in excess of the option exercise price, of options exercised during 2017, 2016 and 2015 was $623 million, $546 million and $497 million, respectively.

Cash received from the exercise of stock options for 2017, 2016 and 2015 was $602 million, $893 million and $618 million, respectively.

We do not have a specific policy on repurchasing shares to satisfy share option exercises. Rather, we have a general policy on repurchasing shares to meet common stock issuance requirements for our benefit plans (including share option exercises), conversion of our convertible securities, acquisitions and other corporate purposes. Various factors determine the amount and timing of our share repurchases, including our capital requirements, the number of shares we expect to issue for acquisitions and employee benefit plans, market conditions (including the trading price of our stock), and regulatory and legal considerations. These factors can change at any time, and there can be no assurance as to the number of shares we will repurchase or when we will repurchase them.

Employee Stock Ownership Plan

The Wells Fargo & Company 401(k) Plan (401(k) Plan) is a defined contribution plan with an Employee Stock Ownership Plan (ESOP) feature. The ESOP feature enables the 401(k) Plan to borrow money to purchase our preferred or common stock. From 1994 through 2017, with the exception of 2009, we loaned money to the 401(k) Plan to purchase shares of our ESOP preferred stock. As our employer contributions are made to the 401(k) Plan and are used by the 401(k) Plan to make ESOP loan payments, the ESOP preferred stock in the 401(k) Plan is released and converted into our common stock shares. Dividends on the common stock shares allocated as a result of the release and conversion of the ESOP preferred stock reduce retained earnings, and the shares are considered outstanding for computing earnings per share. Dividends on the unallocated ESOP preferred stock do not reduce retained earnings, and the shares are not considered to be common stock equivalents for computing earnings per share. Loan principal and interest payments are made from our employer contributions to the 401(k) Plan, along with dividends paid on the ESOP preferred stock. With each principal and interest payment, a portion of the ESOP preferred stock is released and converted to common stock shares, which are allocated to the 401(k) Plan participants and invested in the Wells Fargo ESOP Fund within the 401(k) Plan.

Table 19.6 presents the balance of common stock and unreleased preferred stock held in the Wells Fargo ESOP fund, the fair value of unreleased ESOP preferred stock and the dividends on allocated shares of common stock and unreleased ESOP Preferred Stock paid to the 401(k) Plan.

Table 19.6: Common Stock and Unreleased Preferred Stock in the Wells Fargo ESOP Fund

			Shares outstanding
			December 31,
(in millions, except shares)	**2017**	2016	2015
Allocated shares (common)	**124,670,717**	128,189,305	137,418,176
Unreleased shares (preferred)	**1,556,104**	1,439,181	1,252,386
Fair value of unreleased ESOP preferred shares	**$ 1,556**	1,439	1,252

			Dividends paid
			Year ended December 31,
	2017	2016	2015
Allocated shares (common)	**$ 195**	208	201
Unreleased shares (preferred)	**166**	169	143

Deferred Compensation Plan for Independent Sales Agents

WF Deferred Compensation Holdings, Inc. is a wholly-owned subsidiary of the Parent formed solely to sponsor a deferred compensation plan for independent sales agents who provide investment, financial and other qualifying services for or with respect to participating affiliates.

The Nonqualified Deferred Compensation Plan for Independent Contractors, which became effective January 1, 2002, allowed participants to defer all or part of their eligible compensation payable to them by a participating affiliate. The plan was frozen for new compensation deferrals effective January 1, 2012. The Parent has fully and unconditionally guaranteed the deferred compensation obligations of WF Deferred Compensation Holdings, Inc. under the plan.

Note 20: Revenue from Contracts with Customers

Our revenue includes net interest income on financial instruments and noninterest income. Table 20.1 presents our year ended December 31, 2017, revenue by operating segment given our current accounting policies. For additional description of our operating segments, including additional financial information and the underlying management accounting process, see Note 25 (Operating Segments) to Financial Statements in this Report.

We will reflect the adoption of Accounting Standards Update (ASU) 2014-09 – *Revenue from Contracts with Customers* ("the new revenue guidance") in first quarter 2018 and will include additional disaggregation of specific categories of revenue.

Table 20.1: Revenue by Operating Segment

					Year ended December 31, 2017
(in millions)	Community Banking	Wholesale Banking	Wealth and Investment Management	Other (2)	Consolidated Company
Net interest income (1)	30,365	16,967	4,493	(2,268)	49,557
Noninterest income:					
Service charges on deposit accounts	2,905	2,205	17	(16)	5,111
Trust and investment fees:					
Brokerage advisory, commissions and other fees	1,831	303	9,072	(1,848)	9,358
Trust and investment management	889	524	2,877	(918)	3,372
Investment banking	(60)	1,827	(2)	—	1,765
Total trust and investment fees	2,660	2,654	11,947	(2,766)	14,495
Card fees	3,613	345	6	(4)	3,960
Other fees:					
Charges and fees on loans (1)	307	956	4	(4)	1,263
Cash network fees	498	8	—	—	506
Commercial real estate brokerage commissions	—	461	1	—	462
Letters of credit fees (1)	5	300	4	(4)	305
Wire transfer and other remittance fees	240	204	8	(4)	448
All other fees (1)	447	125	1	—	573
Total other fees	1,497	2,054	18	(12)	3,557
Mortgage banking (1)	3,895	458	(10)	7	4,350
Insurance (1)	98	913	88	(50)	1,049
Net gains from trading activities (1)	59	700	294	—	1,053
Net gains (losses) on debt securities (1)	709	(232)	2	—	479
Net gains from equity investments (1)	1,144	117	7	—	1,268
Lease income (1)	—	1,907	—	—	1,907
Other income of the segment (1)	1,762	85	64	(308)	1,603
Total noninterest income	18,342	11,206	12,433	(3,149)	38,832
Revenue	48,707	28,173	16,926	(5,417)	88,389

(1) Most of our revenue is not within the scope of Accounting Standards Update (ASU) 2014-09 – *Revenue from Contracts with Customers,* and additional details are included in other footnotes to our financial statements. The scope explicitly excludes net interest income as well as many other revenues for financial assets and liabilities, including loans, leases, securities, and derivatives.
(2) Includes the elimination of certain items that are included in more than one business segment, substantially all of which represents products and services for WIM customers served through Community Banking distribution channels.

Following is a discussion of key revenues within the scope of the new revenue guidance. We provide services to customers which have related performance obligations that we complete to recognize revenue. Our revenues are generally recognized either immediately upon the completion of our service or over time as we perform services. Any services performed over time generally require that we render services each period and therefore we measure our progress in completing these services based upon the passage of time.

SERVICE CHARGES ON DEPOSIT ACCOUNTS are earned on depository accounts for commercial and consumer customers and include fees for account and overdraft services. Account services include fees for event-driven services and fees for periodic account maintenance activities. Our obligation for event-driven services is satisfied at the time of the event when the service is delivered, while our obligation for maintenance services is satisfied over the course of each month. Our obligation for overdraft services is satisfied at the time of the overdraft.

BROKERAGE ADVISORY, COMMISSIONS AND OTHER FEES are earned for providing full-service and discount brokerage services predominantly to retail brokerage clients. These revenues include fees earned on asset-based and transactional accounts and other brokerage advisory services.

Asset-based revenues are charged based on the market value of the client's assets. The services associated with these revenues, which include investment advice, active management of client assets, or assistance with selecting and engaging a third-party advisory manager, are generally performed over a month or quarter.

Transactional revenues are based on the size and number of transactions executed at the client's direction and are generally recognized on the trade date.

TRUST AND INVESTMENT MANAGEMENT FEES are earned for providing trust, investment management and other related services.

Trust services include acting as a trustee for corporate trust, personal trust, and agency assets. Obligations for trust services are generally satisfied over time but may be satisfied at points in time for certain activities that are transactional in nature. Investment management services include managing and administering assets, including mutual funds, and institutional separate accounts. Fees for these services are generally determined based on a tiered scale relative to the market value of assets under management (AUM). In addition to AUM, we have client assets under administration (AUA) that earn various administrative fees which are generally based on the extent of the services provided to administer the account. Services with AUM and AUA-based fees are generally performed over time.

Other related services include the custody and safekeeping of accounts.

INVESTMENT BANKING FEES are earned for services related to underwriting debt and equity securities, arranging loan syndications and performing other advisory services. Our performance obligation for these services is satisfied at closing of the transaction.

CARD FEES include credit and debit card interchange and network revenues and various card-related fees. Card-related fees such as late fees, cash advance fees, and balance transfer fees are loan-related and excluded from the scope of the new revenue guidance.

Credit and debit card interchange and network revenues are earned on credit and debit card transactions conducted through payment networks such as Visa, MasterCard, and American Express. Interchange income is recognized concurrently with the delivery of services on a daily basis.

Interchange and network revenues are presented net of cardholder rewards and rebates. Cardholder rewards and rebates reduced card fee revenue by $1.2 billion, $1.0 billion, and $863 million for the years ended December 31, 2017, 2016, and 2015, respectively.

CASH NETWORK FEES are earned for processing ATM transactions. Our obligation is completed daily upon settlement of ATM transactions.

COMMERCIAL REAL ESTATE BROKERAGE COMMISSIONS are earned for assisting customers in the sale of real estate property. Revenue is recognized once the client has signed and accepted an offer for sale of the property, which is when our performance obligation is met. Fees are based on a fixed percentage of the sales price.

WIRE TRANSFER AND OTHER REMITTANCE FEES consist of fees earned for funds transfer services and issuing cashier's checks and money orders. The payment terms and pricing of the fees for each type of transaction are fixed and outlined in published fee schedules. Our obligation is satisfied at the time of the transaction processing.

Note 21: Employee Benefits and Other Expenses

Pension and Postretirement Plans

We sponsor a frozen noncontributory qualified defined benefit retirement plan, the Wells Fargo & Company Cash Balance Plan (Cash Balance Plan), which covers eligible employees of Wells Fargo. The Cash Balance Plan was frozen on July 1, 2009, and no new benefits accrue after that date.

Prior to July 1, 2009, eligible employees' Cash Balance Plan accounts were allocated a compensation credit based on a percentage of their certified compensation; the freeze discontinued the allocation of compensation credits after June 30, 2009. Investment credits continue to be allocated to participants' accounts based on their accumulated balances.

We did not make a contribution to our Cash Balance Plan in 2017. We do not expect that we will be required to make a contribution to the Cash Balance Plan in 2018; however, this is dependent on the finalization of the actuarial valuation in 2018. Our decision of whether to make a contribution in 2018 will be based on various factors including the actual investment performance of plan assets during 2018. Given these uncertainties, we cannot estimate at this time the amount, if any, that we will contribute in 2018 to the Cash Balance Plan. For the nonqualified pension plans and postretirement benefit plans, there is no minimum required contribution beyond the amount needed to fund benefit payments; we may contribute more to our postretirement benefit plans dependent on various factors.

We sponsored the Pension and Life Assurance Plan of Wachovia Bank to employees in the United Kingdom (UK Pension Plan). In September 2017, an annuity contract was entered into that effected a full settlement of this UK Pension Plan, resulting in a plan settlement of $74 million and a settlement loss of $7 million.

Our nonqualified defined benefit plans are unfunded and provide supplemental defined benefit pension benefits to certain eligible employees. The benefits under these plans were frozen in prior years.

We provide health care and life insurance benefits for certain retired employees and we reserve the right to amend, modify or terminate any of the benefits at any time. In October 2016, the Wells Fargo & Company Retiree Plan (Retiree Plan), a postretirement plan, was amended and restated effective January 1, 2017. Significant changes included eliminating certain self-insured options and replacing these with a fully-insured Group Medicare Advantage Plan, and adjusting the retirement medical allowance and subsidy amounts to reflect the reduced Group Medicare Advantage Plan premiums. These changes resulted in a net prior service credit of $177 million that reduced the Retiree Plan obligation in 2016.

The information set forth in the following tables is based on current actuarial reports using the measurement date of December 31 for our pension and postretirement benefit plans.

Table 21.1 presents the changes in the benefit obligation and the fair value of plan assets, the funded status, and the amounts recognized on the balance sheet.

Table 21.1: Changes in Benefit Obligation and Fair Value of Plan Assets

	December 31, 2017			December 31, 2016		
	Pension benefits			Pension benefits		
(in millions)	**Qualified**	**Non-qualified**	**Other benefits**	Qualified	Non-qualified	Other benefits
Change in benefit obligation:						
Benefit obligation at beginning of year	**$ 10,774**	**630**	**731**	10,673	647	1,002
Service cost	**5**	**—**	**—**	3	—	—
Interest cost	**412**	**24**	**28**	422	26	39
Plan participants' contributions	**—**	**—**	**40**	—	—	72
Actuarial loss (gain)	**634**	**46**	**(102)**	336	9	(82)
Benefits paid	**(651)**	**(79)**	**(88)**	(649)	(52)	(132)
Medicare Part D subsidy	**—**	**—**	**1**	—	—	9
Amendment	**—**	**—**	**—**	—	—	(177)
Settlement	**(74)**	**—**	**—**	—	—	—
Foreign exchange impact	**10**	**—**	**1**	(11)	—	—
Benefit obligation at end of year	**11,110**	**621**	**611**	10,774	630	731
Change in plan assets:						
Fair value of plan assets at beginning of year	**10,120**	**—**	**549**	8,836	—	568
Actual return on plan assets	**1,253**	**—**	**56**	642	—	30
Employer contribution	**11**	**79**	**7**	1,303	52	2
Plan participants' contributions	**—**	**—**	**40**	—	—	72
Benefits paid	**(651)**	**(79)**	**(88)**	(649)	(52)	(132)
Medicare Part D subsidy	**—**	**—**	**1**	—	—	9
Settlement	**(74)**	**—**	**—**	—	—	—
Foreign exchange impact	**8**	**—**	**—**	(12)	—	—
Fair value of plan assets at end of year	**10,667**	**—**	**565**	10,120	—	549
Funded status at end of year	**$ (443)**	**(621)**	**(46)**	(654)	(630)	(182)
Amounts recognized on the balance sheet at end of year: Liabilities	**$ (443)**	**(621)**	**(46)**	(654)	(630)	(182)

Table 21.2 provides information for pension plans with benefit obligations in excess of plan assets.

Table 21.2: Pension Plans with Benefit Obligations in Excess of Plan Assets

(in millions)	Dec 31, 2017	Dec 31, 2016
Projected benefit obligation	$ 11,721	11,398
Accumulated benefit obligation	11,717	11,395
Fair value of plan assets	10,656	10,113

Table 21.3 presents the components of net periodic benefit cost and other comprehensive income (OCI).

Table 21.3: Net Periodic Benefit Cost and Other Comprehensive Income

	December 31, 2017			December 31, 2016			December 31, 2015		
	Pension benefits			Pension benefits			Pension benefits		
(in millions)	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Service cost	$ 5	—	—	3	—	—	2	—	6
Interest cost	412	24	28	422	26	39	429	25	42
Expected return on plan assets	(652)	—	(30)	(608)	—	(30)	(644)	—	(35)
Amortization of net actuarial loss (gain)	148	11	(9)	146	12	(5)	108	18	(4)
Amortization of prior service credit	—	—	(10)	—	—	(2)	—	—	(3)
Settlement loss	7	6	—	5	2	—	—	13	—
Curtailment gain	—	—	—	—	—	—	—	—	(43)
Net periodic benefit cost	(80)	41	(21)	(32)	40	2	(105)	56	(37)
Other changes in plan assets and benefit obligations recognized in other comprehensive income:									
Net actuarial loss (gain)	33	46	(128)	302	9	(82)	560	(25)	(23)
Amortization of net actuarial gain (loss)	(148)	(11)	9	(146)	(12)	5	(108)	(18)	4
Prior service cost (credit)	1	—	—	—	—	(177)	—	—	18
Amortization of prior service credit	—	—	10	—	—	2	—	—	3
Settlement	(8)	(6)	—	(5)	(2)	—	—	(13)	—
Total recognized in other comprehensive income	(122)	29	(109)	151	(5)	(252)	452	(56)	2
Total recognized in net periodic benefit cost and other comprehensive income	$ (202)	70	(130)	119	35	(250)	347	—	(35)

Table 21.4 provides the amounts recognized in cumulative OCI (pre tax).

Table 21.4: Benefits Recognized in Cumulative OCI

	December 31, 2017			December 31, 2016		
	Pension benefits			Pension benefits		
(in millions)	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Net actuarial loss (gain)	$ 3,156	192	(360)	3,279	163	(242)
Net prior service credit	—	—	(166)	(1)	—	(175)
Total	$ 3,156	192	(526)	3,278	163	(417)

The net actuarial loss for the defined benefit pension plans and other post retirement plans that will be amortized from cumulative OCI into net periodic benefit cost in 2018 is $127 million. The net prior service credit for other post retirement plans that will be amortized from cumulative OCI into net periodic benefit cost in 2018 is $10 million.

Plan Assumptions
For additional information on our pension accounting assumptions, see Note 1 (Summary of Significant Accounting Policies). Table 21.5 presents the weighted-average discount rates used to estimate the projected benefit obligation for pension benefits.

Table 21.5: Discount Rates Used to Estimate Projected Benefit Obligation

	December 31, 2017			December 31, 2016		
	Pension benefits			Pension benefits		
	Qualified	**Non-qualified**	**Other benefits**	Qualified	Non-qualified	Other benefits
Discount rate	**3.65%**	**3.55**	**3.54**	4.00	4.00	4.00

Table 21.6 presents the weighted-average assumptions used to determine the net periodic benefit cost.

Table 21.6: Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost

	December 31, 2017			December 31, 2016			December 31, 2015		
	Pension benefits			Pension benefits			Pension benefits		
	Qualified	**Non-qualified**	**Other benefits**	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Discount rate (1)	**3.98%**	**3.93**	**4.00**	3.99	4.11	4.16	4.00	3.60	4.00
Expected return on plan assets	**6.70**	**N/A**	**5.75**	6.75	N/A	5.75	7.00	N/A	6.00

(1) The discount rate includes the impact of interim remeasurements as applicable.

To account for postretirement health care plans we used health care cost trend rates to recognize the effect of expected changes in future health care costs due to medical inflation, utilization changes, new technology, regulatory requirements and Medicare cost shifting. In determining the end of year benefit obligation, we assumed an average annual increase of approximately 9.00% for health care costs in 2018. This rate is assumed to trend down 0.40%-0.70% per year until the trend rate reaches an ultimate rate of 4.50% in 2026. The 2017 periodic benefit cost was determined using an initial annual trend rate of 8.90%. This rate was assumed to decrease 0.50%-0.60% per year until the trend rate reached an ultimate rate of 4.50% in 2026. Increasing the assumed health care trend by one percentage point in each year would increase the benefit obligation as of December 31, 2017, by $13 million and the total of the interest cost and service cost components of the net periodic benefit cost for 2017 by $1 million. Decreasing the assumed health care trend by one percentage point in each year would decrease the benefit obligation as of December 31, 2017, by $11 million and the total of the interest cost and service cost components of the net periodic benefit cost for 2017 by $1 million.

Investment Strategy and Asset Allocation
We seek to achieve the expected long-term rate of return with a prudent level of risk given the benefit obligations of the pension plans and their funded status. Our overall investment strategy is designed to provide our Cash Balance Plan with long-term growth opportunities while ensuring that risk is mitigated through diversification across numerous asset classes and various investment strategies. We target the asset allocation for our Cash Balance Plan at a target mix range of 25%-45% equities, 45%-65% fixed income, and approximately 10% in real estate, venture capital, private equity and other investments. The Employee Benefit Review Committee (EBRC), which includes several members of senior management, formally reviews the investment risk and performance of our Cash Balance Plan on a quarterly basis. Annual Plan liability analysis and periodic asset/liability evaluations are also conducted.

Other benefit plan assets include (1) assets held in a 401(h) trust, which are invested with a target mix of 40%-60% for both equities and fixed income, and (2) assets held in the Retiree Medical Plan Voluntary Employees' Beneficiary Association (VEBA) trust, which are invested with a general target asset mix of 20%-40% equities and 60%-80% fixed income. Members of the EBRC formally review the investment risk and performance of these assets on a quarterly basis.

Projected Benefit Payments
Future benefits that we expect to pay under the pension and other benefit plans are presented in Table 21.7.

Table 21.7: Projected Benefit Payments

	Pension benefits		
(in millions)	Qualified	Non-qualified	Other Benefits
Year ended December 31,			
2018	$ 789	54	48
2019	797	52	48
2020	775	50	48
2021	774	49	47
2022	768	46	46
2023-2027	3,426	206	205

Fair Value of Plan Assets

Table 21.8 presents the balances of pension plan assets and other benefit plan assets measured at fair value. In accordance with accounting guidance that we adopted effective January 1, 2016, we do not classify an investment in the fair value hierarchy (Level 1, 2 or 3), if we use the non-published net asset value (NAV) per share (or its equivalent) that has been communicated to us as an investor as a practical expedient to measure fair value. We generally use NAV per share as the fair value measurement for certain investments, including some hedge funds and real estate holdings. Investments with published NAVs continue to be classified in the fair value hierarchy. See Note 17 (Fair Values of Assets and Liabilities) for fair value hierarchy level definitions.

Table 21.8: Pension and Other Benefit Plan Assets

	Carrying value at year end							
	Pension plan assets				Other benefits plan assets			
(in millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
December 31, 2017								
Cash and cash equivalents	**$ 1**	**234**	**—**	**235**	**85**	**23**	**—**	**108**
Long duration fixed income (1)	**875**	**4,424**	**—**	**5,299**	**—**	**—**	**—**	**—**
Intermediate (core) fixed income (2)	**—**	**255**	**—**	**255**	**—**	**185**	**—**	**185**
High-yield fixed income	**—**	**267**	**—**	**267**	**—**	**—**	**—**	**—**
International fixed income	**60**	**223**	**—**	**283**	**—**	**—**	**—**	**—**
Domestic large-cap stocks (3)	**825**	**300**	**—**	**1,125**	**—**	**130**	**—**	**130**
Domestic mid-cap stocks	**227**	**133**	**—**	**360**	**—**	**34**	**—**	**34**
Domestic small-cap stocks	**224**	**12**	**—**	**236**	**—**	**20**	**—**	**20**
Global stocks (4)	**89**	**391**	**—**	**480**	**—**	**—**	**—**	**—**
International stocks (5)	**542**	**257**	**—**	**799**	**23**	**38**	**—**	**61**
Emerging market stocks	**—**	**305**	**—**	**305**	**—**	**—**	**—**	**—**
Real estate	**157**	**31**	**20**	**208**	**—**	**—**	**—**	**—**
Hedge funds/absolute return	**62**	**28**	**—**	**90**	**—**	**—**	**—**	**—**
Other	**—**	**72**	**8**	**80**	**3**	**—**	**23**	**26**
Plan investments - excluding investments at NAV	**$ 3,062**	**6,932**	**28**	**10,022**	**111**	**430**	**23**	**564**
Investments at NAV (6)				**594**				**—**
Net receivables				**51**				**1**
Total plan assets				**$10,667**				**565**
December 31, 2016								
Cash and cash equivalents	$ 4	275	—	279	103	5	—	108
Long duration fixed income (1)	868	4,023	19	4,910	—	—	—	—
Intermediate (core) fixed income (2)	—	307	—	307	—	98	—	98
High-yield fixed income	5	258	—	263	—	—	—	—
International fixed income	54	261	—	315	—	—	—	—
Domestic large-cap stocks (3)	750	316	—	1,066	—	68	—	68
Domestic mid-cap stocks	205	124	—	329	—	18	—	18
Domestic small-cap stocks	185	12	—	197	—	10	—	10
Global stocks (4)	90	372	—	462	—	—	—	—
International stocks (5)	515	221	—	736	21	11	—	32
Emerging market stocks	—	277	—	277	—	—	—	—
Real estate	116	1	25	142	—	—	—	—
Hedge funds/absolute return	59	53	—	112	—	—	—	—
Other	—	77	8	85	3	—	23	26
Plan investments - excluding investments at NAV	$ 2,851	6,577	52	9,480	127	210	23	360
Investments at NAV (6)				592				189
Net receivables				48				—
Total plan assets				$ 10,120				549

(1) This category includes a diversified mix of assets which are being managed in accordance with a duration target of approximately 10 years and an emphasis on corporate credit bonds combined with investments in U.S. Treasury securities and other U.S. agency and non-agency bonds.
(2) This category includes assets that are intermediate duration, investment grade bonds held in investment strategies benchmarked to the Bloomberg Barclays Capital U.S. Aggregate Bond Index, including U.S. Treasury securities, agency and non-agency asset-backed bonds and corporate bonds.
(3) This category covers a broad range of investment styles, including active, enhanced index and passive approaches, as well as style characteristics of value, core and growth emphasized strategies. Assets in this category are currently diversified across eight unique investment strategies with no single investment manager strategy representing more than 2.5% of total plan assets.
(4) This category consists of four unique investment strategies providing exposure to broadly diversified, global equity investments, which generally have an allocation of 40-60% in U.S. domiciled equities and an equivalent allocation range in non-U.S. equities, with no single strategy representing more than 1.5% of total Plan assets.
(5) This category includes assets diversified across five unique investment strategies providing exposure to companies in developed market, non-U.S. countries with no single strategy representing more than 2.5% of total plan assets.
(6) Consists of certain investments that are measured at fair value using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

Table 21.9 presents the changes in Level 3 pension plan and other benefit plan assets measured at fair value.

Table 21.9: Fair Value Level 3 Pension and Other Benefit Plan Assets

(in millions)	Balance beginning of year	Gains (losses) Realized	Gains (losses) Unrealized (1)	Purchases, sales and settlements (net)	Transfers Into/ (Out of) Level 3	Balance end of year
Year ended December 31, 2017						
Pension plan assets:						
Long duration fixed income	**$ 19**	**—**	**—**	**—**	**(19)**	**—**
High-yield fixed income	**—**	**—**	**—**	**—**	**—**	**—**
Real estate	**25**	**(3)**	**5**	**(4)**	**(3)**	**20**
Other	**8**	**—**	**—**	**—**	**—**	**8**
Total pension plan assets	**$ 52**	**(3)**	**5**	**(4)**	**(22)**	**28**
Other benefits plan assets:						
Other	**$ 23**	**—**	**—**	**—**	**—**	**23**
Total other benefit plan assets	**$ 23**	**—**	**—**	**—**	**—**	**23**
Year ended December 31, 2016						
Pension plan assets:						
Long duration fixed income	$ 16	—	—	3	—	19
High-yield fixed income	4	—	—	(3)	(1)	—
Real estate	33	6	(1)	(13)	—	25
Other	8	—	—	—	—	8
Total pension plan assets	$ 61	6	(1)	(13)	(1)	52
Other benefits plan assets:						
Other	$ 23	1	—	(1)	—	23
Total other benefit plan assets	$ 23	1	—	(1)	—	23

(1) All unrealized gains (losses) relate to instruments held at period end.

VALUATION METHODOLOGIES Following is a description of the valuation methodologies used for assets measured at fair value.

Cash and Cash Equivalents – includes investments in collective investment funds valued at fair value based upon the fund's NAV per share held at year-end. The NAV per share is quoted on a private market that is not active; however, the NAV per share is based on underlying investments traded on an active market. This group of assets also includes investments in registered investment companies valued at the NAV per share held at year-end and in interest-bearing bank accounts.

Long Duration, Intermediate (Core), High-Yield, and International Fixed Income – includes investments traded on the secondary markets; prices are measured by using quoted market prices for similar securities, pricing models, and discounted cash flow analyses using significant inputs observable in the market where available, or a combination of multiple valuation techniques. This group of assets also includes highly liquid government securities such as U.S. Treasuries, limited partnerships valued at the NAV, registered investment companies and collective investment funds described above.

Domestic, Global, International and Emerging Market Stocks – investments in exchange-traded equity securities are valued at quoted market values. This group of assets also includes investments in registered investment companies and collective investment funds described above.

Real Estate – includes investments in real estate, which are valued at fair value based on an income capitalization valuation approach. Market values are estimates, and the actual market price of the real estate can only be determined by negotiation between independent third parties in sales transactions. This group of assets also includes investments in exchange-traded equity securities and collective investment funds described above.

Hedge Funds / Absolute Return – includes investments in registered investment companies, limited partnerships and collective investment funds, as described above.

Other – insurance contracts that are stated at cash surrender value. This group of assets also includes investments in collective investment funds described above.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While we believe our valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Defined Contribution Retirement Plans

We sponsor a defined contribution retirement plan, the Wells Fargo & Company 401(k) Plan (401(k) Plan). Under the 401(k) Plan, after one month of service, eligible employees may contribute up to 50% of their certified compensation, subject to statutory limits. Eligible employees who complete one year of service are eligible for quarterly company matching contributions, which are generally dollar for dollar up to 6% of an employee's eligible certified compensation. Matching contributions are 100% vested. The 401(k) Plan includes an employer discretionary profit sharing contribution feature to allow us to make a contribution to eligible employees' 401(k) Plan accounts for a plan year. Eligible employees who complete one year of service are eligible for profit sharing contributions. Profit sharing contributions are vested after three years of service. Total defined contribution retirement plan expenses were $1.2 billion in both 2017 and 2016 and $1.1 billion in 2015.

Other Expenses

Table 21.10 presents expenses exceeding 1% of total interest income and noninterest income in any of the years presented that are not otherwise shown separately in the financial statements or Notes to Financial Statements.

Table 21.10: Other Expenses

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Operating losses	**$ 5,492**	1,608	1,871
Outside professional services	**3,813**	3,138	2,665
Contract services	**1,369**	1,203	978
Operating leases	**1,351**	1,329	278
Cardholder rewards and rebates (1)	**1,201**	1,047	863
Outside data processing	**891**	888	985

(1) Noninterest income from card fees is net of cardholder rewards and rebates expense.

Note 22: Income Taxes

On December 22, 2017, the Tax Cuts & Jobs Act (Tax Act) was enacted resulting in significant changes to both domestic tax law and the U.S taxation of foreign subsidiaries. While many provisions of the law became effective January 1, 2018, we were required to recognize various tax impacts of the Tax Act as of December 31, 2017, in accordance with ASC Topic 740, Income Taxes and SEC Staff Accounting Bulletin 118. Accordingly, our income tax expense for 2017 reflected $3.7 billion of net estimated tax benefits related to the Tax Act, primarily as a result of re-measuring our deferred taxes for the federal tax rate reduction from 35% to 21%. We used reasonable estimates and recorded provisional amounts as of December 31, 2017, when re-measuring our deferred taxes. Our initial accounting related to the re-measurement is incomplete, since the temporary difference calculations need to be finalized as we complete our U.S. tax filing during 2018. We will collect and analyze the final temporary difference data and monitor any interpretations that may emerge for various provisions of the Tax Act throughout 2018 and adjust our original estimate accordingly.

Table 22.1 presents the components of income tax expense.

Table 22.1: Income Tax Expense

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Current:			
Federal	**$ 3,507**	6,712	10,822
State and local	**561**	1,395	1,669
Foreign	**183**	175	139
Total current	**4,251**	8,282	12,630
Deferred:			
Federal	**156**	1,498	(2,047)
State and local	**564**	296	(235)
Foreign	**(54)**	(1)	17
Total deferred	**666**	1,793	(2,265)
Total	**$ 4,917**	10,075	10,365

The tax effects of our temporary differences that gave rise to significant portions of our deferred tax assets and liabilities are presented in Table 22.2.

Table 22.2: Net Deferred Tax Liability

(in millions)	**Dec 31, 2017**	Dec 31, 2016
Deferred tax assets		
Allowance for loan losses	**$ 2,816**	4,374
Deferred compensation and employee benefits	**2,377**	4,045
Accrued expenses	**722**	1,022
PCI loans	**1,057**	1,762
Net unrealized losses on investment securities	**—**	707
Net operating loss and tax credit carry forwards	**341**	391
Other	**409**	1,307
Total deferred tax assets	**7,722**	13,608
Deferred tax assets valuation allowance	**(397)**	(280)
Deferred tax liabilities		
Mortgage servicing rights	**(3,421)**	(5,292)
Leasing	**(4,084)**	(4,522)
Mark to market, net	**(5,816)**	(5,511)
Intangible assets	**(539)**	(1,001)
Net unrealized gains on investment securities	**(55)**	—
Insurance reserves	**(750)**	(1,588)
Other	**(821)**	(2,465)
Total deferred tax liabilities	**(15,486)**	(20,379)
Net deferred tax liability (1)	**$ (8,161)**	(7,051)

(1) The net deferred tax liability is included in accrued expenses and other liabilities.

Deferred taxes related to net unrealized gains (losses) on investment securities, net unrealized gains (losses) on derivatives, foreign currency translation, and employee benefit plan adjustments are recorded in cumulative OCI (see Note 24 (Other Comprehensive Income)). These associated adjustments decreased OCI by $434 million in 2017. OCI was not adjusted to reflect a $400 million impact of the Tax Act recognized in 2017 tax expense for the re-measurement of deferred tax assets related to the items recorded in OCI. In 2018, we expect to adopt ASU 2018-02 – Income Statement-Reporting Comprehensive Income (Topic 220): *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income,* and reclassify the $400 million from OCI to retained earnings.

We have determined that a valuation reserve is required for 2017 in the amount of $397 million predominantly attributable to deferred tax assets in various state and foreign jurisdictions where we believe it is more likely than not that these deferred tax assets will not be realized. In these jurisdictions, carry back limitations, lack of sources of taxable income, and tax planning strategy limitations contributed to our conclusion that the deferred tax assets would not be realizable. We have concluded that it is more likely than not that the remaining deferred tax assets will be realized based on our history of earnings, sources of taxable income in carry back periods, and our ability to implement tax planning strategies.

At December 31, 2017, we had net operating loss carry forwards with related deferred tax assets of $341 million. If these carry forwards are not utilized, they will expire in varying amounts through 12/31/2037.

As a result of the deemed mandatory repatriation provision in the Tax Act, we included an estimated $4.0 billion of undistributed foreign earnings in taxable income and recognized an associated $173 million of net income tax expense. We were able to reasonably estimate our foreign earnings and profits calculations as of December 31, 2017, and will finalize these calculations in 2018 as we complete our tax filings and our analysis of the new provisions of the Tax Act. We do not intend to distribute these foreign earnings in a taxable manner, and therefore intend to limit distributions to foreign earnings previously taxed in the U.S., that would qualify for the 100% dividends received deduction, and that would not result in any significant state or foreign taxes. All other undistributed foreign earnings will continue to be permanently reinvested outside the U.S. and the related tax liability on these earnings is insignificant.

Table 22.3 reconciles the statutory federal income tax expense and rate to the effective income tax expense and rate. Our effective tax rate is calculated by dividing income tax expense by income before income tax expense less the net income from noncontrolling interests.

Table 22.3: Effective Income Tax Expense and Rate

						December 31,
	2017		2016		2015	
(in millions)	**Amount**	**Rate**	Amount	Rate	Amount	Rate
Statutory federal income tax expense and rate	**$ 9,485**	**35.0%**	$ 11,204	35.0%	$ 11,641	35.0%
Change in tax rate resulting from:						
State and local taxes on income, net of federal income tax benefit	**926**	**3.4**	1,004	3.1	1,025	3.1
Tax-exempt interest	**(812)**	**(3.0)**	(725)	(2.2)	(641)	(1.9)
Tax credits	**(1,419)**	**(5.2)**	(1,251)	(3.9)	(1,108)	(3.3)
Non-deductible accruals	**1,320**	**4.9**	81	0.3	25	0.1
Tax reform	**(3,713)**	**(13.7)**	—	—	—	—
Other	**(870)**	**(3.3)**	(238)	(0.8)	(577)	(1.8)
Effective income tax expense and rate	**$ 4,917**	**18.1%**	$ 10,075	31.5%	$ 10,365	31.2%

The effective income tax rate for 2017 reflected the estimated impact of the Tax Act, including a benefit of $3.9 billion resulting from the re-measurement of the Company's estimated net deferred tax liability as of December 31, 2017, partially offset by $173 million of tax expense relating to the estimated tax impact of the deemed repatriation of the Company's previously undistributed foreign earnings. The effective tax rate was also adversely impacted by $1.3 billion tax expense relating to discrete non tax-deductible items (predominantly litigation accruals). The effective income tax rate for 2016 included net reductions in reserves for uncertain tax positions resulting from settlements with tax authorities, partially offset by a net increase in tax benefits related to tax credit investments. The effective income tax rate for 2015 included net reductions in reserves for uncertain tax positions primarily due to audit resolutions of prior period matters with U.S. federal and state taxing authorities.

Table 22.4 presents the change in unrecognized tax benefits.

Table 22.4: Change in Unrecognized Tax Benefits

	Year ended December 31,	
(in millions)	**2017**	2016
Balance at beginning of year	**$ 5,029**	4,806
Additions:		
For tax positions related to the current year	**367**	284
For tax positions related to prior years	**158**	177
Reductions:		
For tax positions related to prior years	**(319)**	(127)
Lapse of statute of limitations	**(48)**	(27)
Settlements with tax authorities	**(20)**	(84)
Balance at end of year	**$ 5,167**	5,029

Of the $5.2 billion of unrecognized tax benefits at December 31, 2017, approximately $3.5 billion would, if recognized, affect the effective tax rate. The remaining $1.7 billion of unrecognized tax benefits relates to income tax positions on temporary differences.

We recognize interest and penalties related to unrecognized tax benefits as a component of income tax expense. As of December 31, 2017 and 2016, we have accrued approximately $726 million and $589 million for the payment of interest and penalties, respectively. In 2017, we recognized in income tax expense a net tax expense related to interest and penalties of $96 million. In 2016, we recognized in income tax expense a net tax expense related to interest and penalties of $136 million.

We are subject to U.S. federal income tax as well as income tax in numerous state and foreign jurisdictions. We are routinely examined by tax authorities in these various jurisdictions. The IRS is currently examining the 2011 through 2014 consolidated federal income tax returns of Wells Fargo & Company and its subsidiaries. In addition, we are currently subject to examination by various state, local and foreign taxing authorities. With few exceptions, Wells Fargo and its subsidiaries are not subject to federal, state, local and foreign income tax examinations for taxable years prior to 2007.

We are litigating or appealing various issues related to prior IRS examinations for the periods 2003 through 2010. For the 2003 through 2006 periods, we have paid the IRS the contested income tax and interest associated with these issues and refund claims have been filed for the respective years. It is possible that one or more of these examinations, appeals or litigation may be resolved within the next twelve months resulting in a decrease of up to $1.0 billion to our gross unrecognized tax benefits.

Note 23: Earnings Per Common Share

Table 23.1 shows earnings per common share and diluted earnings per common share and reconciles the numerator and denominator of both earnings per common share calculations. See Note 1 (Summary of Significant Accounting Policies) for discussion of private share repurchases and the Consolidated Statement of Changes in Equity and Note 19 (Common Stock and Stock Plans) for information about stock and options activity and terms and conditions of warrants.

Table 23.1: Earnings Per Common Share Calculations

		Year ended December 31,	
(in millions, except per share amounts)	**2017**	2016	2015
Wells Fargo net income	**$ 22,183**	21,938	22,894
Less: Preferred stock dividends and other	**1,629**	1,565	1,424
Wells Fargo net income applicable to common stock (numerator)	**$ 20,554**	20,373	21,470
Earnings per common share			
Average common shares outstanding (denominator)	**4,964.6**	5,052.8	5,136.5
Per share	**$ 4.14**	4.03	4.18
Diluted earnings per common share			
Average common shares outstanding	**4,964.6**	5,052.8	5,136.5
Add: Stock options	**17.1**	18.9	26.7
Restricted share rights	**24.7**	25.9	32.8
Warrants	**10.9**	10.7	13.8
Diluted average common shares outstanding (denominator)	**5,017.3**	5,108.3	5,209.8
Per share	**$ 4.10**	3.99	4.12

Table 23.2 presents the outstanding options to purchase shares of common stock that were anti-dilutive (the exercise price was higher than the weighted-average market price), and therefore not included in the calculation of diluted earnings per common share.

Table 23.2: Outstanding Anti-Dilutive Options

	Weighted-average shares		
	Year ended December 31,		
(in millions)	**2017**	2016	2015
Options	**1.9**	3.2	5.7

Note 24: Other Comprehensive Income

Table 24.1 provides the components of other comprehensive income (OCI), reclassifications to net income by income statement line item, and the related tax effects.

Table 24.1: Summary of Other Comprehensive Income

									Year ended December 31,
			2017			2016			2015
(in millions)	**Before tax**	**Tax effect**	**Net of tax**	Before tax	Tax effect	Net of tax	Before tax	Tax effect	Net of tax
Investment securities:									
Net unrealized gains (losses) arising during the period	**$ 2,719**	**(1,056)**	**1,663**	(3,458)	1,302	(2,156)	(3,318)	1,237	(2,081)
Reclassification of net (gains) losses to net income:									
Interest income on investment securities (1)	**198**	**(75)**	**123**	7	(3)	4	(1)	—	(1)
Net gains on debt securities	**(479)**	**181**	**(298)**	(942)	355	(587)	(952)	356	(596)
Net gains from equity investments	**(456)**	**172**	**(284)**	(300)	113	(187)	(571)	213	(358)
Other noninterest income	**—**	**—**	**—**	(5)	2	(3)	(6)	3	(3)
Subtotal reclassifications to net income	**(737)**	**278**	**(459)**	(1,240)	467	(773)	(1,530)	572	(958)
Net change	**1,982**	**(778)**	**1,204**	(4,698)	1,769	(2,929)	(4,848)	1,809	(3,039)
Derivatives and hedging activities:									
Fair Value Hedges:									
Change in fair value of excluded components on fair value hedges (3)	**(253)**	**95**	**(158)**	—	—	—	—	—	—
Cash Flow Hedges:									
Net unrealized gains (losses) arising during the period on cash flow hedges	**(287)**	**108**	**(179)**	177	(67)	110	1,549	(584)	965
Reclassification of net (gains) losses to net income on cash flow hedges:									
Interest income on investment securities	**—**	**—**	**—**	—	—	—	(3)	1	(2)
Interest income on loans	**(551)**	**208**	**(343)**	(1,043)	393	(650)	(1,103)	416	(687)
Interest expense on long-term debt	**8**	**(3)**	**5**	14	(5)	9	17	(6)	11
Subtotal reclassifications to net income	**(543)**	**205**	**(338)**	(1,029)	388	(641)	(1,089)	411	(678)
Net change	**(1,083)**	**408**	**(675)**	(852)	321	(531)	460	(173)	287
Defined benefit plans adjustments:									
Net actuarial and prior service gains (losses) arising during the period	**49**	**(12)**	**37**	(52)	(40)	(92)	(512)	193	(319)
Reclassification of amounts to net periodic benefit costs (2):									
Amortization of net actuarial loss	**150**	**(57)**	**93**	153	(57)	96	122	(46)	76
Settlements and other	**3**	**2**	**5**	5	(1)	4	(8)	3	(5)
Subtotal reclassifications to net periodic benefit costs	**153**	**(55)**	**98**	158	(58)	100	114	(43)	71
Net change	**202**	**(67)**	**135**	106	(98)	8	(398)	150	(248)
Foreign currency translation adjustments:									
Net unrealized gains (losses) arising during the period	**96**	**3**	**99**	(3)	4	1	(137)	(12)	(149)
Reclassification of net gains to net income:									
Net gains from equity investments	**—**	**—**	**—**	—	—	—	(5)	—	(5)
Subtotal reclassifications to net income	**—**	**—**	**—**	—	—	—	(5)	—	(5)
Net change	**96**	**3**	**99**	(3)	4	1	(142)	(12)	(154)
Other comprehensive income (loss)	**$ 1,197**	**(434)**	**763**	(5,447)	1,996	(3,451)	(4,928)	1,774	(3,154)
Less: Other comprehensive income (loss) from noncontrolling interests, net of tax			**(62)**			(17)			67
Wells Fargo other comprehensive income (loss), net of tax			**$ 825**			(3,434)			(3,221)

(1) Represents net unrealized gains and losses amortized over the remaining lives of securities that were transferred from the available-for-sale portfolio to the held-to-maturity portfolio.
(2) These items are included in the computation of net periodic benefit cost, which is recorded in employee benefits expense (see Note 21 (Employee Benefits and Other Expenses) for additional details).
(3) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income.

Table 24.2 provides the cumulative OCI balance activity on an after-tax basis.

Table 24.2: Cumulative OCI Balances

(in millions)	Investment securities	Derivatives and hedging activities	Defined benefit plans adjustments	Foreign currency translation adjustments	Cumulative other comprehensive income (loss)
Balance, December 31, 2014	$ 4,926	333	(1,703)	(38)	3,518
Net unrealized gains (losses) arising during the period	(2,081)	965	(319)	(149)	(1,584)
Amounts reclassified from accumulated other comprehensive income	(958)	(678)	71	(5)	(1,570)
Net change	(3,039)	287	(248)	(154)	(3,154)
Less: Other comprehensive income (loss) from noncontrolling interests	74	—	—	(7)	67
Balance, December 31, 2015	1,813	620	(1,951)	(185)	297
Net unrealized gains (losses) arising during the period	(2,156)	110	(92)	1	(2,137)
Amounts reclassified from accumulated other comprehensive income	(773)	(641)	100	—	(1,314)
Net change	(2,929)	(531)	8	1	(3,451)
Less: Other comprehensive loss from noncontrolling interests	(17)	—	—	—	(17)
Balance, December 31, 2016	(1,099)	89	(1,943)	(184)	(3,137)
Transition adjustment (1)	**—**	**168**	**—**	**—**	**168**
Balance, January 1, 2017	**(1,099)**	**257**	**(1,943)**	**(184)**	**(2,969)**
Net unrealized gains (losses) arising during the period	**1,663**	**(337)**	**37**	**99**	**1,462**
Amounts reclassified from accumulated other comprehensive income	**(459)**	**(338)**	**98**	**—**	**(699)**
Net change	**1,204**	**(675)**	**135**	**99**	**763**
Less: Other comprehensive income (loss) from noncontrolling interests	**(66)**	**—**	**—**	**4**	**(62)**
Balance, December 31, 2017	**$ 171**	**(418)**	**(1,808)**	**(89)**	**(2,144)**

(1) Transition adjustment relates to the adoption of ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*. See Note 1 for more information.

Note 25: Operating Segments

We have three reportable operating segments: Community Banking; Wholesale Banking; and Wealth and Investment Management (WIM). We define our operating segments by product type and customer segment and their results are based on our management accounting process, for which there is no comprehensive, authoritative guidance equivalent to GAAP for financial accounting. The management accounting process measures the performance of the operating segments based on our management structure and is not necessarily comparable with similar information for other financial services companies. If the management structure and/or the allocation process changes, allocations, transfers and assignments may change.

Community Banking offers a complete line of diversified financial products and services to consumers and small businesses with annual sales generally up to $5 million in which the owner generally is the financial decision maker. These financial products and services include checking and savings accounts, credit and debit cards, and automobile, student, mortgage, home equity and small business lending, as well as referrals to Wholesale Banking and WIM business partners.

Community Banking serves customers through a complete range of channels, including traditional and in-supermarket and other small format branches, ATMs, digital (online, mobile, and social), and contact centers (phone, email and correspondence).

The Community Banking segment also includes the results of our Corporate Treasury activities net of allocations (including funds transfer pricing, capital, liquidity and certain corporate expenses) in support of other segments and results of investments in our affiliated venture capital partnerships.

Wholesale Banking provides financial solutions to businesses across the United States with annual sales generally in excess of $5 million and to financial institutions globally. Wholesale Banking provides a complete line of business banking, commercial, corporate, capital markets, cash management and real estate banking products and services. These include traditional commercial loans and lines of credit, letters of credit, asset-based lending, equipment leasing, international trade facilities, trade financing, collection services, foreign exchange services, treasury management, merchant payment processing, institutional fixed-income sales, interest rate, commodity and equity risk management, online/electronic products such as the *Commercial Electronic Office*® (*CEO*®) portal, corporate trust fiduciary and agency services, and investment banking services. Wholesale Banking also supports the CRE market with products and services such as construction loans for commercial and residential development, land acquisition and development loans, secured and unsecured lines of credit, interim financing arrangements for completed structures, rehabilitation loans, affordable housing loans and letters of credit, permanent loans for securitization, CRE loan servicing and real estate and mortgage brokerage services.

Wealth and Investment Management provides a full range of personalized wealth management, investment and retirement products and services to clients across U.S. based businesses including Wells Fargo Advisors, The Private Bank, Abbot Downing, Wells Fargo Institutional Retirement and Trust, and Wells Fargo Asset Management. We deliver financial planning, private banking, credit, investment management and fiduciary services to high-net worth and ultra-high-net worth individuals and families. We also serve clients' brokerage needs, supply retirement and trust services to institutional clients and provide investment management capabilities delivered to global institutional clients through separate accounts and the Wells Fargo Funds.

Other includes the elimination of certain items that are included in more than one business segment, substantially all of which represents products and services for Wealth and Investment Management customers served through Community Banking distribution channels.

Note 25: Operating Segments *(continued)*

Table 25.1 presents our results by operating segment.

Table 25.1: Operating Segments

(income/expense in millions, average balances in billions)		Community Banking	Wholesale Banking	Wealth and Investment Management	Other (1)	Consolidated Company
2017						
Net interest income (2)	**$**	**30,365**	**16,967**	**4,493**	**(2,268)**	**49,557**
Provision (reversal of provision) for credit losses		**2,555**	**(19)**	**(5)**	**(3)**	**2,528**
Noninterest income		**18,342**	**11,206**	**12,433**	**(3,149)**	**38,832**
Noninterest expense		**32,478**	**16,755**	**12,631**	**(3,380)**	**58,484**
Income (loss) before income tax expense (benefit)		**13,674**	**11,437**	**4,300**	**(2,034)**	**27,377**
Income tax expense (benefit)		**1,327**	**2,753**	**1,610**	**(773)**	**4,917**
Net income (loss) before noncontrolling interests		**12,347**	**8,684**	**2,690**	**(1,261)**	**22,460**
Less: Net income (loss) from noncontrolling interests		**276**	**(15)**	**16**	**—**	**277**
Net income (loss) (3)	**$**	**12,071**	**8,699**	**2,674**	**(1,261)**	**22,183**
2016						
Net interest income (2)	$	29,833	16,052	3,913	(2,044)	47,754
Provision (reversal of provision) for credit losses		2,691	1,073	(5)	11	3,770
Noninterest income		19,033	12,490	12,033	(3,043)	40,513
Noninterest expense		27,422	16,126	12,059	(3,230)	52,377
Income (loss) before income tax expense (benefit)		18,753	11,343	3,892	(1,868)	32,120
Income tax expense (benefit)		6,182	3,136	1,467	(710)	10,075
Net income (loss) before noncontrolling interests		12,571	8,207	2,425	(1,158)	22,045
Less: Net income (loss) from noncontrolling interests		136	(28)	(1)	—	107
Net income (loss) (3)	$	12,435	8,235	2,426	(1,158)	21,938
2015						
Net interest income (2)	$	29,242	14,350	3,478	(1,769)	45,301
Provision (reversal of provision) for credit losses		2,427	27	(25)	13	2,442
Noninterest income		20,099	11,554	12,299	(3,196)	40,756
Noninterest expense		26,981	14,116	12,067	(3,190)	49,974
Income (loss) before income tax expense (benefit)		19,933	11,761	3,735	(1,788)	33,641
Income tax expense (benefit)		6,202	3,424	1,420	(681)	10,365
Net income (loss) before noncontrolling interests		13,731	8,337	2,315	(1,107)	23,276
Less: Net income from noncontrolling interests		240	143	(1)	—	382
Net income (loss) (3)	$	13,491	8,194	2,316	(1,107)	22,894
2017						
Average loans	**$**	**476.7**	**464.6**	**71.9**	**(57.1)**	**956.1**
Average assets		**984.2**	**821.8**	**214.4**	**(87.4)**	**1,933.0**
Average deposits		**729.3**	**464.5**	**189.0**	**(78.2)**	**1,304.6**
2016						
Average loans		486.9	449.3	67.3	(53.5)	950.0
Average assets		977.3	782.0	211.5	(85.4)	1,885.4
Average deposits		701.2	438.6	187.8	(77.0)	1,250.6

(1) Includes the elimination of certain items that are included in more than one business segment, most of which represents products and services for Wealth and Investment Management customers served through Community Banking distribution channels.
(2) Net interest income is the difference between interest earned on assets and the cost of liabilities to fund those assets. Interest earned includes actual interest earned on segment assets and, if the segment has excess liabilities, interest credits for providing funding to other segments. The cost of liabilities includes interest expense on segment liabilities and, if the segment does not have enough liabilities to fund its assets, a funding charge based on the cost of excess liabilities from another segment.
(3) Represents segment net income (loss) for Community Banking; Wholesale Banking; and Wealth and Investment Management segments and Wells Fargo net income for the consolidated company.

Note 26: Parent-Only Financial Statements

The following tables present Parent-only condensed financial statements.

Table 26.1: Parent-Only Statement of Income

		Year ended December 31,	
(in millions)	**2017**	2016	2015
Income			
Dividends from subsidiaries (1)	**$ 20,746**	12,776	14,346
Interest income from subsidiaries	**1,984**	1,615	907
Other interest income	**146**	155	199
Other income	**1,238**	177	576
Total income	**24,114**	14,723	16,028
Expense			
Interest expense:			
Indebtedness to nonbank subsidiaries	**189**	387	325
Short-term borrowings	**—**	—	1
Long-term debt	**3,595**	2,619	1,784
Other	**5**	19	4
Noninterest expense	**1,888**	1,300	932
Total expense	**5,677**	4,325	3,046
Income before income tax benefit and equity in undistributed income of subsidiaries	**18,437**	10,398	12,982
Income tax benefit	**(319)**	(1,152)	(870)
Equity in undistributed income of subsidiaries	**3,427**	10,388	9,042
Net income	**$ 22,183**	21,938	22,894

(1) Includes dividends paid from indirect bank subsidiaries of $17.9 billion, $12.5 billion and $13.8 billion in 2017, 2016 and 2015, respectively.

Note 26: Parent-Only Financial Statements *(continued)*

Table 26.2: Parent-Only Statement of Comprehensive Income

	Year ended December 31,		
(in millions)	**2017**	2016	2015
Net income	**$ 22,183**	21,938	22,894
Other comprehensive income (loss), net of tax:			
Investment securities	**94**	(76)	52
Derivatives and hedging activities	**(158)**	—	—
Defined benefit plans adjustment	**118**	(20)	(254)
Equity in other comprehensive income (loss) of subsidiaries	**771**	(3,338)	(3,019)
Other comprehensive income (loss), net of tax:	**825**	(3,434)	(3,221)
Total comprehensive income	**$ 23,008**	18,504	19,673

Table 26.3: Parent-Only Balance Sheet

(in millions)	**Dec 31, 2017**	Dec 31, 2016
Assets		
Cash and cash equivalents due from:		
Subsidiary banks	**$ 23,180**	36,657
Nonaffiliates	**1**	3
Investment securities issued by:		
Subsidiary banks	**—**	15,009
Nonaffiliates	**18**	9,271
Loans to subsidiaries:		
Bank	**—**	54,937
Nonbank	**138,681**	41,343
Investments in subsidiaries (1)	**206,367**	201,550
Other assets	**7,156**	6,750
Total assets	**$ 375,403**	365,520
Liabilities and equity		
Accrued expenses and other liabilities	**7,902**	7,064
Long-term debt	**146,130**	133,920
Indebtedness to nonbank subsidiaries	**14,435**	24,955
Total liabilities	**168,467**	165,939
Stockholders' equity	**206,936**	199,581
Total liabilities and equity	**$ 375,403**	365,520

(1) The years ended December 31, 2017, and December 31, 2016, include indirect ownership of bank subsidiaries with equity of $170.5 billion and $159.5 billion, respectively.

Table 26.4: Parent-Only Statement of Cash Flows

		Year ended December 31,	
(in millions)	**2017**	2016	2015
Cash flows from operating activities:			
Net cash provided by operating activities (1)	**$ 22,359**	10,652	13,469
Cash flows from investing activities:			
Available-for-sale securities:			
Sales proceeds:			
Subsidiary banks	**8,658**	—	—
Nonaffiliates	**9,226**	5,472	5,345
Prepayments and maturities:			
Subsidiary banks	**10,250**	15,000	7,750
Purchases:			
Subsidiary banks	**(3,900)**	(15,000)	(12,750)
Nonaffiliates	**—**	(6,544)	(2,709)
Loans:			
Net repayments from (advances to) subsidiaries	**(35,876)**	3,174	460
Capital notes and term loans made to subsidiaries	**(73,729)**	(32,641)	(29,860)
Principal collected on notes/loans made to subsidiaries	**69,286**	15,164	301
Net increase in investment in subsidiaries	**(2,029)**	(606)	(1,283)
Other, net	**113**	18	714
Net cash used by investing activities	**(18,001)**	(15,963)	(32,032)
Cash flows from financing activities:			
Net increase in short-term borrowings and indebtedness to subsidiaries	**(8,685)**	789	2,084
Long-term debt:			
Proceeds from issuance	**22,217**	34,362	31,487
Repayment	**(13,709)**	(15,096)	(9,194)
Preferred stock:			
Proceeds from issuance	**677**	2,101	2,972
Cash dividends paid	**(1,629)**	(1,566)	(1,426)
Common stock:			
Proceeds from issuance	**1,211**	1,415	1,726
Stock tendered for payment of withholding taxes (1)	**(393)**	(494)	(679)
Repurchased	**(9,908)**	(8,116)	(8,697)
Cash dividends paid	**(7,480)**	(7,472)	(7,400)
Other, net	**(138)**	(118)	10
Net cash provided (used) by financing activities	**(17,837)**	5,805	10,883
Net change in cash and due from banks	**(13,479)**	494	(7,680)
Cash and due from banks at beginning of year	**36,660**	36,166	43,846
Cash and due from banks at end of year	**$ 23,181**	36,660	36,166

(1) Prior periods have been revised to conform to the current period presentation.

Note 27: Regulatory and Agency Capital Requirements

The Company and each of its subsidiary banks are subject to regulatory capital adequacy requirements promulgated by federal bank regulatory agencies. The Federal Reserve establishes capital requirements for the consolidated financial holding company, and the OCC has similar requirements for the Company's national banks, including Wells Fargo Bank, N.A. (the Bank).

Table 27.1 presents regulatory capital information for Wells Fargo & Company and the Bank using Basel III, which increased minimum required capital ratios, and introduced a minimum Common Equity Tier 1 (CET1) ratio. We must report the lower of our CET1, tier 1 and total capital ratios calculated under the Standardized Approach and under the Advanced Approach in the assessment of our capital adequacy. The information presented reflects risk-weighted assets (RWAs) under the Standardized and Advanced Approaches with Transition Requirements. The Standardized Approach applies assigned risk weights to broad risk categories, while the calculation of RWAs under the Advanced Approach differs by requiring applicable banks to utilize a risk-sensitive methodology, which relies upon the use of internal credit models, and includes an operational risk component. The Basel III revised definition of capital, and changes are being phased-in effective January 1, 2014, through the end of 2021.

The Bank is an approved seller/servicer of mortgage loans and is required to maintain minimum levels of shareholders' equity, as specified by various agencies, including the United States Department of Housing and Urban Development, GNMA, FHLMC and FNMA. At December 31, 2017, the Bank met these requirements. Other subsidiaries, including the Company's insurance and broker-dealer subsidiaries, are also subject to various minimum capital levels, as defined by applicable industry regulations. The minimum capital levels for these subsidiaries, and related restrictions, are not significant to our consolidated operations.

Table 27.1: Regulatory Capital Information

	Wells Fargo & Company				Wells Fargo Bank, N.A.			
	December 31, 2017		December 31, 2016		**December 31, 2017**		December 31, 2016	
(in millions, except ratios)	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
Regulatory capital:								
Common equity tier 1	**$ 154,765**	**154,765**	148,785	148,785	**143,292**	**143,292**	132,225	132,225
Tier 1	**178,209**	**178,209**	171,364	171,364	**143,292**	**143,292**	132,225	132,225
Total	**210,333**	**220,097**	204,425	214,877	**156,661**	**165,734**	145,665	155,281
Assets:								
Risk-weighted	**$ 1,199,545**	**1,260,663**	1,274,589	1,336,198	**1,090,360**	**1,169,863**	1,143,681	1,222,876
Adjusted average (1)	**1,905,568**	**1,905,568**	1,914,802	1,914,802	**1,708,828**	**1,708,828**	1,714,524	1,714,524
Regulatory capital ratios:								
Common equity tier 1 capital	**12.90%**	**12.28 ***	11.67	11.13 *	**13.14**	**12.25 ***	11.56	10.81 *
Tier 1 capital	**14.86**	**14.14 ***	13.44	12.82 *	**13.14**	**12.25 ***	11.56	10.81 *
Total capital	**17.53**	**17.46 ***	16.04 *	16.08	**14.37**	**14.17 ***	12.74	12.70 *
Tier 1 leverage (1)	**9.35**	**9.35**	8.95	8.95	**8.39**	**8.39**	7.71	7.71

*Denotes the lowest capital ratio as determined under the Advanced and Standardized Approaches.
(1) The leverage ratio consists of Tier 1 capital divided by quarterly average total assets, excluding goodwill and certain other items.

Table 27.2 presents the minimum required regulatory capital ratios under Transition Requirements to which the Company and the Bank were subject as of December 31, 2017, and December 31, 2016.

Table 27.2: Minimum Required Regulatory Capital Ratios – Transition Requirements (1)

	Wells Fargo & Company		Wells Fargo Bank, N.A.	
	December 31, 2017	December 31, 2016	**December 31, 2017**	December 31, 2016
Regulatory capital ratios:				
Common equity tier 1 capital	**6.750%**	5.625	**5.750**	5.125
Tier 1 capital	**8.250**	7.125	**7.250**	6.625
Total capital	**10.250**	9.125	**9.250**	8.625
Tier 1 leverage	**4.000**	4.000	**4.000**	4.000

(1) At December 31, 2017, under transition requirements, the CET1, tier 1 and total capital minimum ratio requirements for Wells Fargo & Company include a capital conservation buffer of 1.250% and a global systemically important bank (G-SIB) surcharge of 1.000%. Only the 1.250% capital conservation buffer applies to the Bank at December 31, 2017.

Report of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Wells Fargo & Company and Subsidiaries (the Company) as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

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, 2017, 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, 2018, 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 1931.

San Francisco, California
March 1, 2018

Quarterly Financial Data

Condensed Consolidated Statement of Income - Quarterly (Unaudited)

				2017				2016
				Quarter ended				Quarter ended
(in millions, except per share amounts)	**Dec 31,**	**Sep 30,**	**Jun 30,**	**Mar 31,**	Dec 31,	Sep 30,	Jun 30,	Mar 31,
Interest income (1)	**$14,958**	**15,044**	**14,694**	**14,213**	14,058	13,487	13,146	12,972
Interest expense (1)	**2,645**	**2,595**	**2,223**	**1,889**	1,656	1,535	1,413	1,305
Net interest income (1)	**12,313**	**12,449**	**12,471**	**12,324**	12,402	11,952	11,733	11,667
Provision for credit losses	**651**	**717**	**555**	**605**	805	805	1,074	1,086
Net interest income after provision for credit losses	**11,662**	**11,732**	**11,916**	**11,719**	11,597	11,147	10,659	10,581
Noninterest income								
Service charges on deposit accounts	**1,246**	**1,276**	**1,276**	**1,313**	1,357	1,370	1,336	1,309
Trust and investment fees	**3,687**	**3,609**	**3,629**	**3,570**	3,698	3,613	3,547	3,385
Card fees	**996**	**1,000**	**1,019**	**945**	1,001	997	997	941
Other fees	**913**	**877**	**902**	**865**	962	926	906	933
Mortgage banking	**928**	**1,046**	**1,148**	**1,228**	1,417	1,667	1,414	1,598
Insurance	**223**	**269**	**280**	**277**	262	293	286	427
Net gains (losses) from trading activities	**132**	**245**	**237**	**439**	(109)	415	328	200
Net gains on debt securities	**157**	**166**	**120**	**36**	145	106	447	244
Net gains from equity investments	**439**	**238**	**188**	**403**	306	140	189	244
Lease income	**458**	**475**	**493**	**481**	523	534	497	373
Other (1)	**558**	**199**	**472**	**374**	(382)	315	482	874
Total noninterest income	**9,737**	**9,400**	**9,764**	**9,931**	9,180	10,376	10,429	10,528
Noninterest expense								
Salaries	**4,403**	**4,356**	**4,343**	**4,261**	4,193	4,224	4,099	4,036
Commission and incentive compensation	**2,665**	**2,553**	**2,499**	**2,725**	2,478	2,520	2,604	2,645
Employee benefits	**1,293**	**1,279**	**1,308**	**1,686**	1,101	1,223	1,244	1,526
Equipment	**608**	**523**	**529**	**577**	642	491	493	528
Net occupancy	**715**	**716**	**706**	**712**	710	718	716	711
Core deposit and other intangibles	**288**	**288**	**287**	**289**	301	299	299	293
FDIC and other deposit assessments	**312**	**314**	**328**	**333**	353	310	255	250
Other	**6,516**	**4,322**	**3,541**	**3,209**	3,437	3,483	3,156	3,039
Total noninterest expense	**16,800**	**14,351**	**13,541**	**13,792**	13,215	13,268	12,866	13,028
Income before income tax expense (1)	**4,599**	**6,781**	**8,139**	**7,858**	7,562	8,255	8,222	8,081
Income tax expense (benefit) (1)	**(1,642)**	**2,181**	**2,245**	**2,133**	2,258	2,601	2,649	2,567
Net income before noncontrolling interests (1)	**6,241**	**4,600**	**5,894**	**5,725**	5,304	5,654	5,573	5,514
Less: Net income from noncontrolling interests	**90**	**58**	**38**	**91**	30	10	15	52
Wells Fargo net income (1)	**$ 6,151**	**4,542**	**5,856**	**5,634**	5,274	5,644	5,558	5,462
Less: Preferred stock dividends and other	**411**	**411**	**406**	**401**	402	401	385	377
Wells Fargo net income applicable to common stock (1)	**$ 5,740**	**4,131**	**5,450**	**5,233**	4,872	5,243	5,173	5,085
Per share information								
Earnings per common share (1)	**$ 1.17**	**0.83**	**1.09**	**1.05**	0.97	1.04	1.02	1.00
Diluted earnings per common share (1)	**1.16**	**0.83**	**1.08**	**1.03**	0.96	1.03	1.01	0.99
Dividends declared per common share	**0.390**	**0.390**	**0.380**	**0.380**	0.380	0.380	0.380	0.375
Average common shares outstanding	**4,912.5**	**4,948.6**	**4,989.9**	**5,008.6**	5,025.6	5,043.4	5,066.9	5,075.7
Diluted average common shares outstanding	**4,963.1**	**4,996.8**	**5,037.7**	**5,070.4**	5,078.2	5,094.6	5,118.1	5,139.4
Market price per common share (2)								
High	**$ 62.24**	**56.45**	**56.60**	**59.99**	58.02	51.00	51.41	53.27
Low	**52.84**	**49.28**	**50.84**	**53.35**	43.55	44.10	44.50	44.50
Quarter-end	**60.67**	**55.15**	**55.41**	**55.66**	55.11	44.28	47.33	48.36

(1) Financial information for prior quarters in 2017 has been revised to reflect the impact of the adoption in fourth quarter 2017 of Accounting Standards Update (ASU) 2017-12 – Derivatives and Hedging (Topic 815): *Targeted Improvements to Accounting for Hedging Activities*. The effect of adoption on previously reported quarter-to-date net income includes $(54) million, $46 million, and $177 million for periods ended September 30, June 30, and March 31, 2017, respectively. See Note 1 (Summary of Significant Accounting Policies) for more information on the adoption of ASU 2017-12.

(2) Based on daily prices reported on the New York Stock Exchange Composite Transaction Reporting System.

Average Balances, Yields and Rates Paid (Taxable-Equivalent basis) - Quarterly (1)(2) - (Unaudited)

	Quarter ended December 31,					
			2017			2016
(in millions)	Average balance	Yields/ rates	Interest income/ expense	Average balance	Yields/ rates	Interest income/ expense
Earning assets						
Federal funds sold, securities purchased under resale agreements and other short-term investments	$ 264,940	1.25%	$ 835	273,073	0.56%	$ 381
Trading assets	111,213	3.01	838	102,757	2.96	761
Investment securities (3):						
Available-for-sale securities:						
Securities of U.S. Treasury and federal agencies	6,423	1.66	27	25,935	1.53	99
Securities of U.S. states and political subdivisions	52,390	3.91	513	53,917	4.06	547
Mortgage-backed securities:						
Federal agencies	152,910	2.62	1,000	147,980	2.37	875
Residential and commercial	9,371	4.85	114	16,456	5.87	242
Other debt and equity securities	49,138	3.70	456	52,692	3.71	492
Total available-for-sale securities	270,232	3.12	2,110	296,980	3.03	2,255
Held-to-maturity securities:						
Securities of U.S. Treasury and federal agencies	44,716	2.19	246	44,686	2.20	246
Securities of U.S. states and political subdivisions	6,263	5.26	83	4,738	5.31	63
Federal agency and other mortgage-backed securities	89,622	2.25	503	46,009	1.81	209
Other debt securities	1,194	2.64	8	3,597	2.26	20
Total held-to-maturity securities	141,795	2.36	840	99,030	2.17	538
Total investment securities	412,027	2.86	2,950	396,010	2.82	2,793
Mortgages held for sale (4)	20,517	3.82	196	27,503	3.43	235
Loans held for sale (4)	114	8.14	2	155	5.42	2
Loans:						
Commercial:						
Commercial and industrial - U.S.	270,294	3.89	2,649	272,828	3.46	2,369
Commercial and industrial - Non U.S.	59,233	2.96	442	54,410	2.58	352
Real estate mortgage	127,199	3.88	1,244	131,195	3.44	1,135
Real estate construction	24,408	4.38	270	23,850	3.61	216
Lease financing	19,226	0.62	31	18,904	5.78	273
Total commercial	500,360	3.68	4,636	501,187	3.45	4,345
Consumer:						
Real estate 1-4 family first mortgage	281,966	4.01	2,826	277,732	4.01	2,785
Real estate 1-4 family junior lien mortgage	40,379	4.96	505	47,203	4.42	524
Credit card	36,428	12.37	1,136	35,383	11.73	1,043
Automobile	54,323	5.13	702	62,521	5.54	870
Other revolving credit and installment	38,366	6.28	607	40,121	5.91	595
Total consumer	451,462	5.10	5,776	462,960	5.01	5,817
Total loans (4)	951,822	4.35	10,412	964,147	4.20	10,162
Other	13,084	2.06	68	6,729	3.27	56
Total earning assets	$ 1,773,717	3.43%	$ 15,301	1,770,374	3.24%	$ 14,390
Funding sources						
Deposits:						
Interest-bearing checking	$ 50,483	0.68%	$ 86	46,907	0.17%	$ 19
Market rate and other savings	679,893	0.19	319	676,365	0.07	122
Savings certificates	20,920	0.31	17	24,362	0.30	18
Other time deposits	68,187	1.49	255	49,170	1.16	144
Deposits in foreign offices	124,597	0.81	254	110,425	0.35	97
Total interest-bearing deposits	944,080	0.39	931	907,229	0.18	400
Short-term borrowings	102,142	0.99	256	124,698	0.33	102
Long-term debt	231,598	2.32	1,344	252,162	1.68	1,061
Other liabilities	24,728	1.86	115	17,210	2.15	94
Total interest-bearing liabilities	1,302,548	0.81	2,646	1,301,299	0.51	1,657
Portion of noninterest-bearing funding sources	471,169	—	—	469,075	—	—
Total funding sources	$ 1,773,717	0.59	2,646	1,770,374	0.37	1,657
Net interest margin and net interest income on a taxable-equivalent basis (5)		2.84%	$ 12,655		2.87%	$ 12,733
Noninterest-earning assets						
Cash and due from banks	$ 19,152			18,967		
Goodwill	26,579			26,713		
Other	115,870			128,196		
Total noninterest-earning assets	$ 161,601			173,876		
Noninterest-bearing funding sources						
Deposits	$ 367,512			376,929		
Other liabilities	57,845			64,775		
Total equity	207,413			201,247		
Noninterest-bearing funding sources used to fund earning assets	(471,169)			(469,075)		
Net noninterest-bearing funding sources	$ 161,601			173,876		
Total assets	$ 1,935,318			1,944,250		

(1) Our average prime rate was 4.30% and 3.54% for the quarters ended December 31, 2017 and 2016, respectively. The average three-month London Interbank Offered Rate (LIBOR) was 1.46% and 0.92% for the same quarters, respectively.
(2) Yield/rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.
(3) Yields and rates are based on interest income/expense amounts for the period, annualized based on the accrual basis for the respective accounts. The average balance amounts represent amortized cost for the periods presented.
(4) Nonaccrual loans and related income are included in their respective loan categories.
(5) Includes taxable-equivalent adjustments of $342 million and $331 million for the quarters ended December 31, 2017 and 2016, respectively, predominantly related to tax-exempt income on certain loans and securities. The federal statutory tax rate was 35% for the periods presented.

Glossary of Acronyms

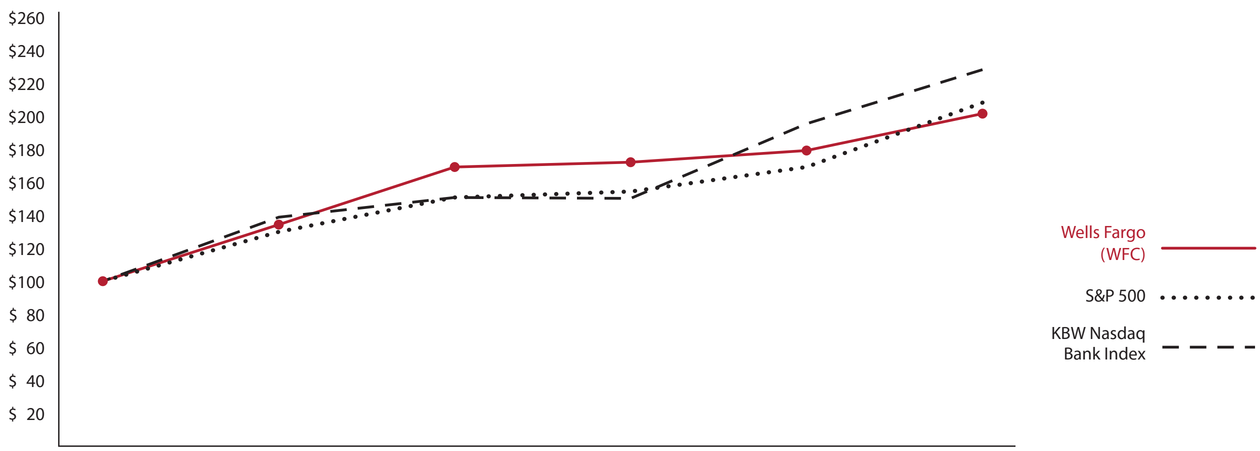
ABS	Asset-backed security	**G-SIB**	Globally systemic important bank
ACL	Allowance for credit losses	**HAMP**	Home Affordability Modification Program
ALCO	Asset/Liability Management Committee	**HUD**	U.S. Department of Housing and Urban Development
ARM	Adjustable-rate mortgage	**LCR**	Liquidity coverage ratio
ASC	Accounting Standards Codification	**LHFS**	Loans held for sale
ASU	Accounting Standards Update	**LIBOR**	London Interbank Offered Rate
AUA	Assets under administration	**LIHTC**	Low income housing tax credit
AUM	Assets under management	**LOCOM**	Lower of cost or market value
AVM	Automated valuation model	**LTV**	Loan-to-value
BCBS	Basel Committee on Bank Supervision	**MBS**	Mortgage-backed security
BHC	Bank holding company	**MHA**	Making Home Affordable programs
CCAR	Comprehensive Capital Analysis and Review	**MHFS**	Mortgages held for sale
CD	Certificate of deposit	**MSR**	Mortgage servicing right
CDO	Collateralized debt obligation	**MTN**	Medium-term note
CDS	Credit default swaps	**NAV**	Net asset value
CECL	Current expected credit loss	**NPA**	Nonperforming asset
CET1	Common Equity Tier 1	**OCC**	Office of the Comptroller of the Currency
CFPB	Consumer Financial Protection Bureau	**OCI**	Other comprehensive income
CLO	Collateralized loan obligation	**OTC**	Over-the-counter
CLTV	Combined loan-to-value	**OTTI**	Other-than-temporary impairment
CMBS	Commercial mortgage-backed securities	**PCI Loans**	Purchased credit-impaired loans
CPI	Collateral protection insurance	**PTPP**	Pre-tax pre-provision profit
CPP	Capital Purchase Program	**RBC**	Risk-based capital
CRE	Commercial real estate	**RMBS**	Residential mortgage-backed securities
DPD	Days past due	**ROA**	Wells Fargo net income to average total assets
ESOP	Employee Stock Ownership Plan	**ROE**	Wells Fargo net income applicable to common stock to average Wells Fargo common stockholders' equity
FAS	Statement of Financial Accounting Standards		
FASB	Financial Accounting Standards Board	**ROTCE**	Return on average tangible common equity
FDIC	Federal Deposit Insurance Corporation	**RWAs**	Risk-weighted assets
FFELP	Federal Family Education Loan Program	**SEC**	Securities and Exchange Commission
FHA	Federal Housing Administration	**S&P**	Standard & Poor's Ratings Services
FHLB	Federal Home Loan Bank	**SLR**	Supplementary leverage ratio
FHLMC	Federal Home Loan Mortgage Corporation	**SPE**	Special purpose entity
FICO	Fair Isaac Corporation (credit rating)	**TARP**	Troubled Asset Relief Program
FNMA	Federal National Mortgage Association	**TDR**	Troubled debt restructuring
FRB	Board of Governors of the Federal Reserve System	**TLAC**	Total Loss Absorbing Capacity
GAAP	Generally accepted accounting principles	**VA**	Department of Veterans Affairs
GNMA	Government National Mortgage Association	**VaR**	Value-at-Risk
GSE	Government-sponsored entity	**VIE**	Variable interest entity

Stock Performance

These graphs compare the cumulative total stockholder return and total compound annual growth rate (CAGR) for our common stock (NYSE: WFC) for the five- and ten-year periods ended December 31, 2017, with the cumulative total stockholder returns for the same periods for the Keefe, Bruyette and Woods (KBW) Total Return Bank Index (KBW Nasdaq Bank Index (BKX)) and the S&P 500 Index.

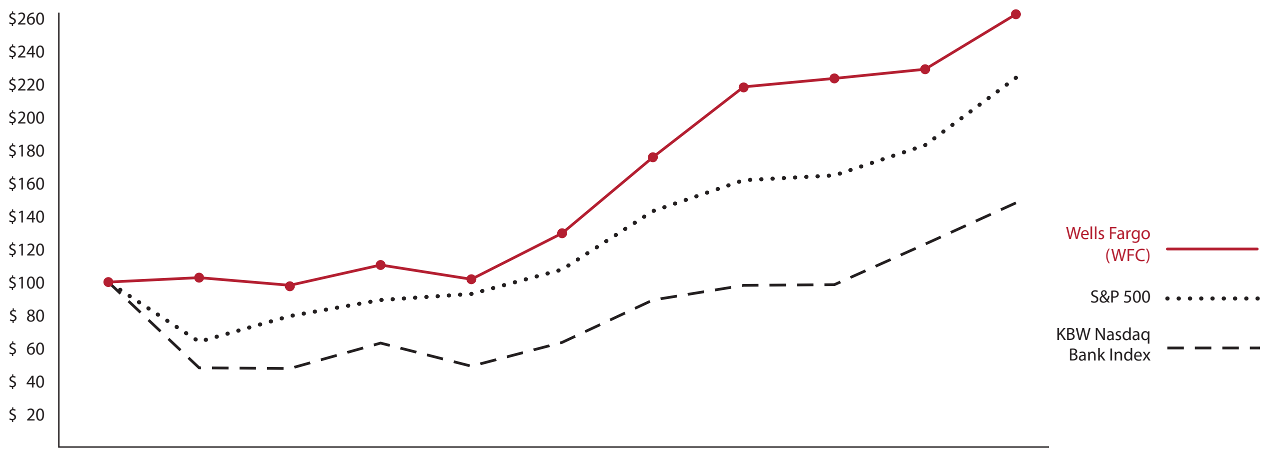
The cumulative total stockholder returns (including reinvested dividends) in the graphs assume the investment of $100 in Wells Fargo's common stock, the KBW Nasdaq Bank Index, and the S&P 500 Index.

Five Year Performance Graph



2012	2013	2014	2015	2016	2017	5-year CAGR	
$100	**$137**	**$169**	**$173**	**$180**	**$204**	**15%**	**Wells Fargo**
100	132	151	153	171	208	16%	S&P 500
100	138	151	151	195	231	18%	KBW Nasdaq Bank Index

Ten Year Performance Graph



2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10-year CAGR	
$100	**$102**	**$97**	**$112**	**$102**	**$130**	**$177**	**$220**	**$224**	**$234**	**$265**	**10%**	**Wells Fargo**
100	63	80	92	94	109	144	163	166	186	226	8%	S&P 500
100	52	52	64	49	65	89	98	98	126	150	4%	KBW Nasdaq Bank Index

Wells Fargo & Company

Wells Fargo & Company (NYSE: WFC) is a diversified, community-based financial services company with $2.0 trillion in assets. Wells Fargo's vision is to satisfy our customers' financial needs and help them succeed financially. Founded in 1852 and headquartered in San Francisco, Wells Fargo provides banking, investments, mortgage, and consumer and commercial finance through more than 8,300 locations, 13,000 ATMs, the internet (wellsfargo.com) and mobile banking, and has offices in 42 countries and territories to support customers who conduct business in the global economy. With approximately 263,000 team members, Wells Fargo serves one in three households in the United States. Wells Fargo & Company was ranked No. 25 on *Fortune*'s 2017 rankings of America's largest corporations.

Common stock

Wells Fargo & Company is listed and trades on the New York Stock Exchange: WFC

4,891,616,628 common shares outstanding (12/31/17)

Stock purchase and dividend reinvestment

You can buy Wells Fargo stock directly from Wells Fargo, even if you're not a Wells Fargo stockholder, through optional cash payments or automatic monthly deductions from a bank account. You can also have your dividends reinvested automatically. It's a convenient, economical way to increase your Wells Fargo investment.

Call 1-877-840-0492 for an enrollment kit, which includes a plan prospectus.

Form 10-K

We will send Wells Fargo's 2017 Annual Report on Form 10-K (including the financial statements filed with the Securities and Exchange Commission) free to any stockholder who asks for a copy in writing. Stockholders also can ask for copies of any exhibit to the Form 10-K. We will charge a fee to cover expenses to prepare and send any exhibits. Please send requests to: Corporate Secretary, Wells Fargo & Company, One Wells Fargo Center, MAC D1053-300, 301 S. College Street, 30th Floor, Charlotte, North Carolina 28202.

SEC filings

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports are available free of charge on our website (www.wellsfargo.com) as soon as practical after they are electronically filed with or furnished to the SEC. Those reports and amendments are also available free of charge on the SEC's website at www.sec.gov.

Forward-looking statements

This Annual Report contains forward-looking statements about our future financial performance and business. Because forward-looking statements are based on our current expectations and assumptions regarding the future, they are subject to inherent risks and uncertainties. Do not unduly rely on forward-looking statements, as actual results could differ materially from expectations. Forward-looking statements speak only as of the date made, and we do not undertake to update them to reflect changes or events that occur after that date. For information about factors that could cause actual results to differ materially from our expectations, refer to the discussion under "Forward-Looking Statements" and "Risk Factors" in the Financial Review portion of this Annual Report.

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www.shareowneronline.com

Annual Stockholders' Meeting
10:00 a.m. Central Time
Tuesday, April 24, 2018
Des Moines Marriott Downtown
700 Grand Avenue
Des Moines, Iowa 50309

Strong for our customers and communities

Company

3rd
Total Deposits (2017)
FDIC data

3rd
Total Assets (2017)
SNL Financial

5th
Biggest Public Company in the World* (2017) *Forbes*

25th
Biggest Company by Revenue in the U.S. (2017) *Fortune*

Innovation leadership

#1
Overall Mobile Performance, Functionality, Ease of Use, Quality & Availability, and Best App & Mobile Web Experience (2017) Keynote Competitive Research

Best Corporate/Institutional Digital Bank in North America (2017) *Global Finance* magazine

#1
Mobile prowess in transfers, wallets, and security, providing customers the ability to temporarily disable debit cards and use a smartphone in place of a card at an ATM (2017) *Business Insider's* Mobile Banking Competitive Edge Study

Diversity

Top Company for LGBT (2017) *DiversityInc*

9th Top Company for Diversity (2017) *DiversityInc*

Perfect Score – 100 Corporate Equality Index (2018, 15th year) Human Rights Campaign

Perfect Score – 100 Disability Equality Index (DEI) Best Places to Work (2017, 2nd year)

Corporate social responsibility

#1
Largest workplace employee giving campaign in the U.S. for ninth consecutive year, based on 2017 donations (2018) United Way Worldwide

Brand

Most Valuable Banking Brand in North America and Retail Banking (2017) Brand Finance®

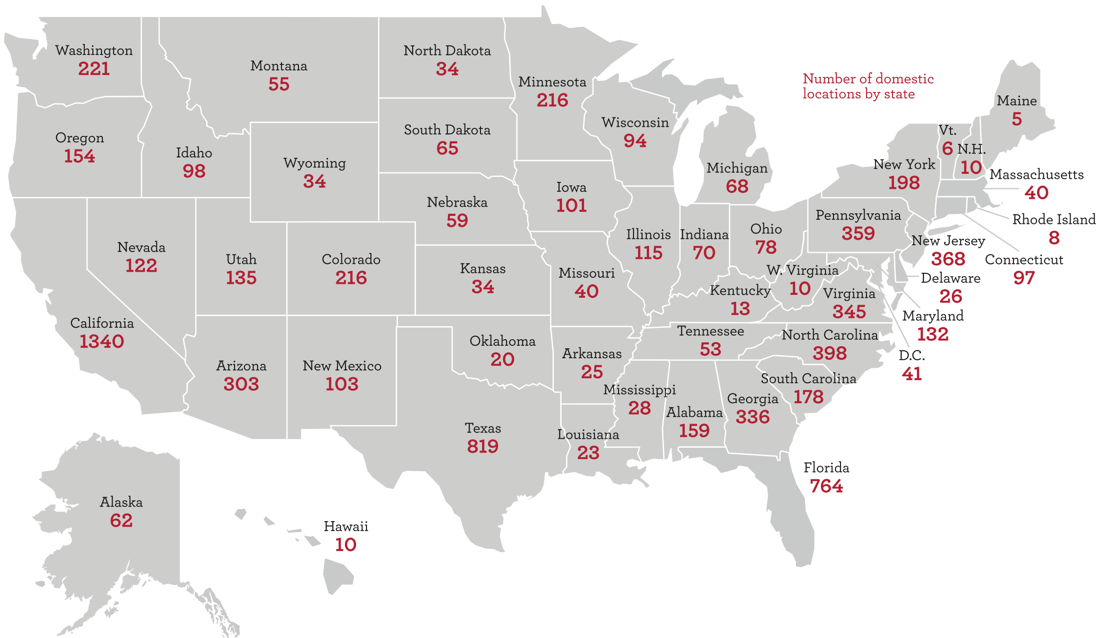
Third-Most Valuable Financial Services Brand in World (2017) *Forbes*

**Based on sales, profits, assets, and market value.*

Wells Fargo's extensive network

Around the world

Argentina
Australia
Bangladesh
Belgium
Brazil
Canada
Cayman Islands
Chile
China
Colombia
Dominican Republic
Ecuador
Finland
France
Germany
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Luxembourg
Mexico
Netherlands
New Zealand
Norway
Philippines
Singapore
South Africa
South Korea
Spain
Sweden
Taiwan
Thailand
Turkey
United Arab Emirates
United Kingdom
Vietnam



Locations*
8,300

ATMs
13,000

Customers
70+ million

wellsfargo.com
28.1 million digital (online and mobile) active customers

Mobile banking
21.2 million mobile active users

**Number of domestic and global locations. Includes Wells Fargo Advisors Private Client Group and Financial Network locations.*

In supporting homeowners and consumers

#1
Retail mortgage lender (2017) *Inside Mortgage Finance*

#5
Home loan originator to minority borrowers, and in low- to moderate-income neighborhoods (2017) HMDA data

#1
Home loan servicer (2017) *Inside Mortgage Finance*

#1
Provider of private student loans among banks (2017) Company and competitor reports

#2
Used auto lender (AutoCount, 2017)

In helping small businesses

#1
In overall performance and best in quality, availability, and ease of use for providing a positive small business banking experience through digital channels (2017) Keynote Competitive Research

In wealth and investment management

#2
U.S. annuity sales (2016) Transamerica Roundtable survey

#3
U.S. full-service retail brokerage provider (2017) Company and competitor reports

#5
U.S. wealth management provider (2017) *Barron's*

#7
U.S. IRA provider (2017) Cerulli Associates

#7
U.S. institutional retirement plan record keeper, based on assets (2017) *PLANSPONSOR* magazine

In treasury management

Best Bank for Payments and Collections in North America (2018) *Global Finance* magazine

Global Best Investment Management Services (2017) *Global Finance* magazine

Wells Fargo & Company
420 Montgomery Street
San Francisco, California 94104
1-866-878-5865 wellsfargo.com

Wells Fargo's Vision

We want to satisfy our customers' financial needs and help them succeed financially.

Our Values

Five primary values guide every action Wells Fargo takes:

- What's right for customers
- People as a competitive advantage
- Ethics
- Diversity and inclusion
- Leadership

Our Goals

Wells Fargo wants to become the financial services leader in:

- Customer service and advice
- Team member engagement
- Innovation
- Risk management
- Corporate citizenship
- Shareholder value

For more information, visit wellsfargo.com/ourvision

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