

PRUDENTIAL FINANCIAL, INC. ANNUAL REPORT

N Prudential

Throughout our history, Prudential has focused on one crucial mission -

to help those we serve achieve financial security.


Today, Prudential's employees - more than 49,000 worldwide -

work together to answer real-life challenges for millions of people.


We welcome the challenges that come next.

## Message from the Chairman

Dear fellow shareholders:
In 1875, The Prudential Friendly Society was founded in Newark, New Jersey, with one objective: to make life insurance available to working families across America. That goal reflected the firm belief that everyone should have the opportunity to achieve financial security and the peace of mind it brings.

More than 140 years later, that belief has given rise to one of the world's largest financial institutions. Prudential Financial comprises three interrelated and complementary businesses - Financial Protection, Retirement and Asset Management - in pursuit of one single uniting purpose: to power the ambitions of people, organizations and communities.

Supporting that pursuit are the extraordinary talent and technical expertise of our employees, a culture of strategic collaboration and a business system that drives outstanding execution. This compelling combination and our financial strength, built and demonstrated over our history, enable us to create and deliver innovative solutions for customers, produce differentiated performance and drive long-term value for our shareholders.

Underpinning all of our work is our commitment to sustainability. We use "sustainability" to describe how we anticipate and manage future risks and opportunities to meet our long-term obligations. As we plan for Prudential's long-term vitality, we take a broad view of the factors that may challenge us and those that may offer opportunities. For many years, we have considered environmental, governance and societal issues important to Prudential's long-term success, and in 2016, we continued our progress in key areas. Sustainability remains crucial to our ability to deliver on our purpose and our promises to all of our stakeholders.

## Delivering distinctive results

We demonstrated the earnings power of our businesses again in 2016, delivering solid results despite a number of challenging economic conditions and headwinds. Our fundamentals remain strong and overall growth in sales and client net flows underscores the marketplace appeal of our brand and solutions.

The strong cash generation by our businesses enables us to deliver on two important objectives: enhancing the value we provide to
shareholders and investing in strategic, long-term growth opportunities. In 2016, we again delivered on our strategy of returning capital to shareholders in a highly disciplined manner, amounting to $\$ 3.2$ billion through $\$ 2$ billion of share repurchases and $\$ 1.2$ billion of Common Stock dividends. Since the beginning of 2011, we have returned more than $\$ 12$ billion to shareholders in the form of share buybacks and dividends. In December 2016, our Board of Directors authorized the repurchase of shares up to a total of $\$ 1.25$ billion for 2017.
"We demonstrated the earnings power of our businesses again in 2016, delivering solid results despite a number of challenging economic conditions and headwinds."

- John Strangfeld


At the same time, we are also investing in strategies to capitalize on long-term growth opportunities across our differentiated businesses. These include data, digital and technology initiatives to leverage our broad skill sets across businesses as well as strategic investments in growth markets, such as Chile and Brazil.

Based on U.S. generally accepted accounting principles (GAAP), net income attributable to Prudential Financial was $\$ 4.368$ billion, or $\$ 9.71$ per Common share, for 2016, compared to $\$ 5.642$ billion, or $\$ 12.71$ per Common share, in 2015.

For 2016, on an after-tax adjusted operating income (AOI)* basis, Prudential Financial earned $\$ 4.107$ billion, or $\$ 9.13$ per Common share, compared to $\$ 4.649$ billion, or $\$ 10.04$ per Common share in 2015.

Our operating return on equity based on adjusted operating income* for the full year was 12.0 percent, modestly below our long-term objective. For the past three years leading into 2016, our operating fundamentals have enabled us to consistently achieve or exceed our long-term operating return on equity objective. After reviewing the current operating environment, including the impact of sustained low interest rates, market volatility and other factors, as well as the multiyear strategic investment in our businesses, we announced in December 2016 a moderate reduction of our near- to mid-term operating return on equity objective to between 12 and 13 percent. Achieving that level of performance will continue to distinguish us in the marketplace, while ensuring that we continue to have the flexibility to invest in our businesses, capitalize on opportunities and deliver value to our shareholders.

In 2016, our adjusted book value* per share grew by more than 7 percent to $\$ 78.95$ at year-end, compared to $\$ 73.59$ a year earlier, after paying $\$ 1.2$ billion in Common Stock dividends.

Our worldwide assets under management also continued to increase, reaching approximately $\$ 1.26$ trillion by year-end 2016, compared to $\$ 1.18$ trillion at December 31, 2015. This growth, which includes substantial client net inflows contributing to account values and assets under management, is an important indicator of our clients' confidence in our company.

Our solid performance is an outcome of our commitment to maintaining our differentiated mix of high-quality businesses, managing risk appropriately, deploying capital effectively and pursuing profitable, long-term growth. These priorities are fundamental to the strength of our operations and enable us to deliver distinctive performance.

## Driving business performance

Our complementary businesses provide diversity in sources of earnings, helping us weather the normal variability of business results and fluctuations in market conditions, while also providing solid growth opportunities. In 2016, our businesses continued to perform well, despite significant market headwinds.

Our International Insurance segment delivered another year of strong performance, and the fundamentals and earnings power of its underlying businesses remain strong. We have adapted our product portfolio in response to the challenging interest rate environment and have leveraged our broad U.S. dollar product portfolio. For the year, U.S. dollar products comprised more than half of our sales in Japan.

We continue to look for opportunities to expand our presence in the countries where we operate, as well as other select markets where we see potential for long-term growth. In 2016, we made further progress in expanding our presence in Latin America, a region where we continue to see opportunity. In March, we completed the acquisition of a stake in a leading provider of retirement services in Chile, enabling us to participate in the growing pension market there. And in September, we agreed to purchase a group life insurance business in Brazil, garnering a market-leading distribution network and an attractive product portfolio that complements our already-strong position in Brazil's individual life insurance market.

In January 2016, we also launched an investment partnership in Africa with the objective of making strategic investments in life insurance companies in leading economies where we see longterm growth potential.

In our U.S. Businesses, we continue to see good momentum across notable areas, reflecting the earnings power of our business model.

Despite the challenging environment for active investment managers, during 2016 our Asset Management segment generated unaffiliated third-party net flows of $\$ 5.7$ billion, including its

14th consecutive year of positive net institutional flows. Our net flows are benefiting from our initiatives to expand distribution and product offerings, as well as our solid overall investment performance. In addition, we are continuing to build out our multi-manager model and invest in the business.

Through our Retirement segment, we serve retail and institutional clients in multiple capacities, including through our plan servicing, stable value, pension risk transfer and payout annuity platforms. This segment had another strong year in 2016, with net flows of $\$ 5.8$ billion and 5 percent account value growth, year over year. We continued to lead in the pension risk transfer market, closing approximately $\$ 8$ billion of significant case wins during the year. Looking ahead, we see strong opportunity to continue to expand our pension risk transfer business, as well as favorable long-term growth prospects across the retirement landscape.

Our Individual Annuities segment remains a core product in our global platform of businesses, with solid return and cash flow prospects. We remain disciplined in our pricing and are achieving our diversification objectives, while improving our risk profile and meeting clients' need for guaranteed income through ongoing product innovation.

Our Individual Life segment showed positive sales and top-line growth trends in 2016. We continue to diversify our product strategy, targeting a prudent mix of sales of guaranteed universal life, term life and other products, including variable life.

Our Group insurance segment produced a significant increase in sales for the year, mainly driven by greater sales of group life. This segment is benefiting from a multiyear underwriting initiative, especially in disability, and a more concentrated focus on the larger client segment. We expect to build on the revenue growth we began to achieve in 2016, while maintaining pricing discipline.

## Managing capital prudently while reducing complexity and volatility

One of our key strategic priorities over the past few years has been to better reflect the strength of Prudential by reducing complexity and volatility and increasing transparency in our financial results. To that end, we have taken several significant steps over the past three years to simplify our operations and reduce sources of volatility in our financial results.

Most recently, in 2016, we completed the recapture of the variable annuity living benefit riders that were managed in a captive insurer. We now house all of our product risks together in our statutory insurance entities. This step substantially simplifies our annuities operation, reduces our capital volatility and increases the certainty around cash flows from the annuities business. In addition, due to synergies that occur with all of the product risks being managed together, we were able to release about $\$ 1$ billion of capital from our annuities business, of which we deployed $\$ 500$ million to share repurchases. Our annuities-
focused statutory insurance entity also paid a dividend of $\$ 1$ billion to the parent company, reflecting earnings from the annuities business during the year.

As our actions in 2016 demonstrate, we remain dedicated to balancing financial strength and flexibility with our commitment to returning capital to our shareholders through dividends and share repurchases. From the commencement of share repurchases in July 2011 through December 31, 2016, the company acquired 90.1 million shares of its Common Stock, at a total cost of $\$ 6.4$ billion. In February 2017, we were pleased to announce a 7 percent increase in our quarterly dividend. Our annualized dividend has nearly doubled over the past five years, growing at an annual rate of 13 percent, reflecting our stronger and more consistent cash generation. Over the same time, we have also reduced our leverage ratios.

## Contributing to effective regulation

As a result of our designation as a non-bank systemically important financial institution in September 2013, Prudential has been supervised by the Board of Governors of the Federal Reserve System and is subject to additional regulatory standards, many of which are still under development. Since our designation, we have been working with the staff of the Federal Reserve Board to help them build a deeper understanding of our businesses and the important differences between insurance companies and banks.

We continue to engage in discussions with the Board of Governors of the Federal Reserve System, as well as our group supervisor, the New Jersey Department of Banking and Insurance, and other state and international regulatory authorities, on the development of supervisory standards tailored for insurance companies. We believe Prudential will remain well capitalized under any reasonable capital standard.

With the new U.S. presidential administration in place, there is uncertainty about the course the regulatory environment will take. We support effective regulations and the protections they provide for customers and clients, while also avoiding unintended consequences, and will continue to work with our regulators to achieve those outcomes.

## Nurturing our talent and culture

Our talent and our culture remain our most important competitive advantages over the long term. They define us as a company and make it possible for us to deliver on our promises to all of our stakeholders. Our unique culture, with its focus on purpose, strategic collaboration, innovation and execution, propels our ability to produce distinctive results and stand out in a crowded global market, helping us attract new customers and new talent. Our unwavering commitment to integrity remains the bedrock of our culture and fundamental to how we operate. We know that only by doing business the right way, every day, will we maintain the trust of our customers and other stakeholders.

Our commitment to embracing diversity and creating a culture of inclusion reflects our founding purpose and is a key element of our culture and our talent initiatives. We recognize that the diversity of experiences, opinions and backgrounds of our Board of Directors and our employees enables us to meet the needs of our customers and help the millions of people we serve become more financially secure. In 2016, we were gratified to receive the Corporate Award from the Executive Leadership Council, in recognition of our enduring commitment to diversity and inclusion.


Our work to enhance the lives of U.S. Veterans and military families remains an important element of our talent management strategy. At our growing Business and Technology Solutions Center in El Paso, Texas, which we established in 2014, nearly half of the employees are Veterans or military spouses. We are pleased that our focus on training and support is enhancing the quality of life for these valuable yet often overlooked sources of talent. For military spouses, in particular, we have provided an opportunity for remote work, enabling them to keep their jobs despite the frequent relocations that come with military service. As a result, they have the chance to build meaningful careers and much-needed financial security for their families.

In 2016, our ongoing efforts to promote diversity and inclusion, enhance the lives of Veterans and military families and be an employer of choice were recognized by a wide variety of external organizations. In February 2017, we were also pleased to be named by $F O R T U N E^{\circledR}$ as the No. 1 world's most admired company in the life and health insurance category for the fourth time since 2010.

## Driving social progress

Our commitment to spurring progress and financial inclusion is evident in everything we do, particularly our work to support underserved markets. We believe that one effective way to create opportunities for financial and social mobility is through thriving cities. To that end, we work with government offices, nonprofits and other business partners to invest in initiatives that help cities transform their infrastructure, educational systems and employment opportunities.

Nowhere is our work more apparent than in our hometown of Newark, New Jersey, where we have concentrated both on revitalizing physical spaces and enhancing programs that bring opportunities to people within the community. Since 1976, Prudential's total investment in Newark has been nearly \$1.175 billion, including $\$ 500$ million for Prudential Tower, the new office building we opened in 2015.

During 2016, we worked toward another exciting step in Newark's ongoing revitalization - the reopening of the landmark Hahne \& Co. building, which once housed one of the country's largest retail stores, but was abandoned when Hahne's closed in 1987. Thanks to a $\$ 50$ million investment from Prudential and backing from other partners, the Hahne's building reopened to the public in early 2017 as a multi-use facility, after years of meticulous remodeling and refurbishing. Located in Newark's downtown and one block from our newest office building, Prudential Tower, the 400,000 -square-foot structure includes up to 100,000 square feet of retail space as well as 160 loft apartments, 64 of which are set aside as affordable homes for low-income and working families.

In 2016, we also partnered to support the opening of a new USO Center at Newark Liberty International Airport in New Jersey. The first of its kind at this location, the center provides active military service members and their families a place to relax and refresh while traveling.

We were also proud to be a founding donor and corporate sponsor of the grand opening in September 2016 of the Smithsonian National Museum of African American History and Culture. The museum's opening helped spur an important national dialogue about the rich and complex heritage of the African American community and how, together, our diverse perspectives and backgrounds contribute to our shared success.

## Looking ahead with confidence

One of our greatest assets remains the strength and independence of our Board of Directors. The varied expertise of our Board of Directors is a crucial element of our program of corporate governance and an important competitive advantage for our company. The Board incorporates diverse perspectives, with a complementary mix of skills, experience and backgrounds, which we believe are key to understanding and representing the interests of our diverse stakeholders. Our Board strives to govern Prudential in a prudent and transparent manner that helps the company achieve sustainable performance and deliver long-term value to our customers and shareholders. The guidance and support our Board provides are key factors behind our strong history of performance and our confidence about the future.

While 2016 brought many challenges, we are pleased that we delivered solid results, thanks to our strategy and business mix, our strong capital position and our talent and culture. We are confident that our business mix and solid fundamentals will continue to produce attractive financial results, driving solid earnings per share growth, strong cash flows and attractive returns to our shareholders. We will continue to bring our diverse resources - our financial expertise, our employees' talents and our capital - together to deliver on our purpose and ensure financial security is within reach for more people around the world.

Thank you for your continued confidence and interest in our company. I look forward to sharing news of our achievements in the future.


## John Strangfeld

Chairman of the Board,
Chief Executive Officer and President

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## NOTES

(1) Adjusted operating income, adjusted book value, as well as operating return on equity, which is based on adjusted operating income and adjusted book value, are non-GAAP measures of Prudential Financial, Inc. that are not calculated in accordance with accounting principles generally accepted in the United States of America (GAAP).

Adjusted operating income excludes "Realized investment gains (losses), net," as adjusted, and related charges and adjustments. A significant element of realized investment gains and losses are impairments and credit-related and interest rate-related gains and losses. Impairments and losses from sales of credit-impaired securities, the timing of which depends largely on market credit cycles, can vary considerably across periods. The timing of other sales that would result in gains or losses, such as interest raterelated gains or losses, is largely subject to our discretion and influenced by market opportunities as well as our tax and capital profile. Realized investment gains (losses) within certain of our businesses for which such gains (losses) are a principal source of earnings, and those associated with terminating hedges of foreign currency earnings and current period yield adjustments are included in adjusted operating income. Adjusted operating income generally excludes realized investment gains and losses from products that contain embedded derivatives, and from associated derivative portfolios that are part of an asset-liability management program related to the risk of those products. However, the effectiveness of our hedging program will ultimately be reflected in adjusted operating income over time. Adjusted operating income also excludes gains and losses from changes in value of certain assets and liabilities relating to foreign currency exchange movements that have been economically hedged or considered part of our capital funding strategies for our international subsidiaries, as well as gains and losses on certain investments that are classified as other trading account assets. Adjusted operating income also excludes investment gains and losses on trading account assets supporting insurance liabilities and changes in experience-rated contractholder liabilities due to asset value changes, because these recorded changes in asset and liability values are expected to ultimately accrue to contractholders. In addition, adjusted operating income excludes the results of divested businesses, which are not relevant to our ongoing operations. Discontinued operations and earnings attributable to noncontrolling interests, each of which is presented as a separate component of net income under GAAP, are also excluded from adjusted operating income. The tax effect associated with pre-tax adjusted operating income is based on applicable IRS and foreign tax regulations inclusive of pertinent adjustments. Adjusted book value is calculated as total equity (GAAP book value) excluding both accumulated other comprehensive income (loss) and the cumulative effect of foreign currency exchange rate remeasurements and currency translation adjustments corresponding to realized investment gains and losses. These items are excluded in order to highlight the book value attributable to our core business operations separate from the portion attributable to external and potentially volatile capital and currency market conditions.

We believe that our use of these non-GAAP measures helps investors understand and evaluate the company's performance and financial position. The presentation of adjusted operating income as we measure it for management purposes enhances the understanding of the results of operations by highlighting the results from ongoing operations and the underlying profitability of our businesses. Trends in the underlying profitability of our businesses can be more clearly identified without the fluctuating effects of the items described above. Adjusted book value augments the understanding of our financial position by providing a measure of net worth that is primarily attributable to our business operations separate from the portion that is affected by capital and currency market conditions and by isolating the accounting impact associated with insurance liabilities that are generally not marked to market and the supporting investments that are marked to market through accumulated other comprehensive income under GAAP. However, adjusted operating income and adjusted book value are not substitutes for income and equity determined in accordance with GAAP, and the adjustments made to derive these measures are important to an understanding of our overall results of operations and financial position.

All facts and figures are as of or for the year ended December 31, 2016, unless otherwise noted.
Insurance and annuities are issued by The Prudential Insurance Company of America, Pruco Life Insurance Company (in New York, by Pruco Life Insurance Company of New Jersey), all located in Newark, NJ (main office), or by Prudential Annuities Life Assurance Corporation, Shelton, CT (main office). Prudential Annuities Life Assurance Corporation is not licensed to do business in New York, effective December 31, 2015. This will have no impact on existing annuity contracts sold through Prudential Annuities Life Assurance Corporation. All are Prudential Financial companies and each is solely responsible for its own financial condition and contractual obligations. Prudential Annuities is a business of Prudential Financial, Inc.

Securities products and services are offered through: Pruco Securities, LLC or Prudential Investment Management Services LLC, both members SIPC and located in Newark, NJ, or Prudential Annuities Distributors, Inc., located in Shelton, CT. All are Prudential Financial companies.

Retirement products and services are provided by Prudential Retirement Insurance and Annuity Company, Hartford, CT, or its affiliates.

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FORTUNE ${ }^{\circledR}$ and "The World's Most Admired Companies ${ }^{\circledR}$ " are registered trademarks of Time Inc. 2016 ranking as of 2/16/2017.

## FINANCIAL HIGHLIGHTS

## Prudential Financial, Inc.

In millions, except per share amounts
For the years ended December 31,
2016
2015
2014

RESULTS BASED ON ADJUSTED OPERATING INCOME (A)(B)
Revenues
Benefits and expenses
Adjusted operating income before income taxes
Operating return on average equity (C)
GAAP RESULTS (B)
Revenues
Benefits and expenses
Income (loss) from continuing operations before income
taxes and equity in earnings of operating joint ventures
Return on average equity (C)
EARNINGS PER SHARE OF COMMON STOCK - diluted (B)(D)
Adjusted operating income after income taxes
$\$ 9.13$
\$10.04
\$9.21
Reconciling items:
Realized investment gains (losses), net, and related charges and adjustments
1.17
3.43
(8.83)

Other reconciling items
Tax (expense) benefit on above
(0.48) (0.23)
0.50

Income (loss) from continuing operations attributable to
Prudential Financial, Inc. (after-tax)

| $\$ 51,574$ | $\$ 48,630$ | $\$ 49,644$ |
| ---: | ---: | ---: |
| 46,175 | 42,399 | 43,752 |
| $\$ 5,399$ | $\$ 6,231$ | $\$ 5,892$ |
|  |  |  |
| $12.0 \%$ | $14.5 \%$ | $14.8 \%$ |
|  |  |  |
| $\$ 58,779$ | $\$ 57,119$ | $\$ 47,199$ |
| 53,074 | 49,350 | 45,181 |
|  |  |  |
| $\$ 5,705$ | $\$ 7,769$ | $\$ 2,018$ |
|  |  |  |
| $8.8 \%$ | $13.3 \%$ | $3.9 \%$ |
|  |  |  |
| $\$ 9.13$ | $\$ 10.04$ | $\$ 9.21$ |
|  |  |  |
| 1.17 | 3.43 | $(0.23)$ |
| $(0.48)$ | 1.07 | $0.53)$ |
| 0.11 |  | $(2.32)$ |
| $\$ 9.71$ | $\$ 12.17$ | $\$ 3.20$ |

## Prudential Financial, Inc.

In millions, unless otherwise noted
As of or for the years ended December 31,
2016
2015
2014
GAAP RESULTS
Total revenues

| $\$ 58,779$ | $\$ 57,119$ | $\$ 54,105$ |
| ---: | ---: | ---: |
|  |  |  |
| $\$ 4,419$ | $\$ 5,712$ | $\$ 1,426$ |
| 0 | 0 | 12 |
| 51 | 70 | 57 |
| $\$ 4,368$ | $\$ 5,642$ | $\$ 1,381$ |

FINANCIAL POSITION
Invested assets
Total assets (E)
Prudential Financial, Inc. equity

| $\$ 444,240$ | $\$ 417,192$ | $\$ 419,986$ |
| ---: | ---: | ---: |
| $\$ 783,962$ | $\$ 757,255$ | $\$ 766,526$ |
| $\$ 45,863$ | $\$ 41,890$ | $\$ 41,770$ |
|  |  |  |
| $\$ 1,264$ | $\$ 1,184$ | $\$ 1,176$ |

Adjusted Operating Income ${ }^{(A)(B)}$ and Income (Loss) from Continuing Operations ${ }^{(B)}$
(pre-tax, in millions)
Adjusted operating income
Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures (GAAP)


Assets Under Management


Adjusted Operating Revenues ${ }^{(A)(B)}$ and GAAP Revenues ${ }^{(B)}$
(in billions)
Adjusted operating revenues
$\square$ Revenues (GAAP)


## Operating Return on

 Average Equity ${ }^{(B)(C)}$ and Return on Average Equity ${ }^{(B)(C)}$Operating return on average equityReturn on average equity

(A) Adjusted operating income is a non-GAAP measure of performance that excludes "Realized investment gains (losses), net," as adjusted, and related charges and adjustments; net investment gains and losses on trading account assets supporting insurance liabilities; change in experience-rated contractholder liabilities due to asset value changes; results of divested businesses and discontinued operations; earnings attributable to noncontrolling interests; and the related tax effects thereof. Adjusted operating income includes equity in earnings of operating joint ventures and the related tax effects thereof. Revenues and benefits and expenses shown as components of adjusted operating income, are presented on the same basis as pre-tax adjusted operating income and are adjusted for the items above as well.

See Management's Discussion and Analysis of Financial Condition and Results of Operations for a discussion of results based on adjusted operating income and the Consolidated Financial Statements for a reconciliation of results based on adjusted operating income to GAAP results.
(B) Represents results of the Financial Services Businesses for the twelve months ended December 31, 2014, and attributed equity of the Financial Services Businesses as of that date.
(C) Operating return on average equity (based on adjusted operating income) is a non-GAAP measure and represents adjusted operating income after-tax (giving effect to the direct equity adjustment for earnings per share calculation for periods prior to 2015), divided by average adjusted book value, which is calculated as Prudential Financial, Inc. equity (GAAP book value) excluding accumulated other comprehensive income and adjusted to remove amount included for foreign currency exchange rate remeasurement. The comparable GAAP measure to operating return on average equity (based on adjusted operating income) is return on average equity (based on income from continuing operations). For the years ended December 31, 2016 and 2015, return on average equity (based on income from continuing operations) represents income from continuing operations after-tax attributable to consolidated Prudential Financial, Inc., as determined in accordance with U.S. GAAP, divided by average total Prudential Financial, Inc. equity. For the year ended December 31, 2014, return on average equity represents income from continuing operations after-tax for the Financial Services Businesses attributable to Prudential Financial, Inc. (giving effect to the direct equity adjustment for earnings per share calculation), divided by average total attributed equity for the Financial Services Businesses. See chart to right for a reconciliation between adjusted book value and GAAP book value.

As of December 31,
$2016 \quad 2015$
2014
GAAP book value at end of period
Less: Accumulated other comprehensive income $14,621 \quad 12,285 \quad 15,882$
Less: Cumulative effect of foreign exchange remeasurement and currency translation adjustments corresponding to realized

| gains/losses | $(3,199)$ | $(3,747)$ | $(4,783)$ |
| :---: | ---: | ---: | ---: |
| Adjusted book value | $\$ 34,441$ | $\$ 33,352$ | $\$ 29,882$ |

(D) From December 18, 2001, the date of demutualization, through December 31, 2014, the Company had two separate classes of common stock. The Common Stock reflected the performance of the Financial Services Businesses and the Class B Stock reflected the performance of the Closed Block Business. Earnings per share were calculated separately for each of these two classes of common stock and included a direct equity adjustment to modify the earnings available to each of the classes of common stock for the difference between the allocation of general and administrative expenses to each of the businesses and the cash flows between the businesses related to these expenses. Accordingly, earnings per share of Common Stock for periods through December 31, 2014, reflect earnings attributable to the Financial Services Businesses. On January 2, 2015, Prudential Financial, Inc. repurchased and cancelled all of the 2.0 million shares of the Class B Stock. Accordingly, earnings per share of Common Stock for periods subsequent to December 31, 2014, reflect the consolidated earnings of Prudential Financial, Inc. In addition, the Class B Repurchase resulted in the elimination of the separation of the Financial Services Businesses and the Closed Block Business. As a result, there is no direct equity adjustment recorded for periods subsequent to December 31, 2014. Earnings per share of the Class B Stock for periods through December 31, 2014, are not presented herein, as they are not meaningful due to the Class $B$ Repurchase.
(E) Prior period amounts are presented on a basis consistent with the current period presentation.

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## Forward-Looking Statements

Some of the statements included in this Annual Report may contain forward-looking statements within the meaning of the U.S Private Securities Reform Act of 1995. Please see page 228 for a description of certain risks and uncertainties that could cause actual results to differ, possibly materially, from expectations or estimates reflected in such forward-looking statements.


#### Abstract

Throughout this Annual Report, "Prudential Financial" refers to Prudential Financial, Inc., the ultimate holding company for all of our companies. "Prudential Insurance" refers to The Prudential Insurance Company of America. "Prudential," the "Company," "we" and "our" refer to our consolidated operations.


## Overview

From December 18, 2001, the date of demutualization, through December 31, 2014, we organized our principal operations into the Financial Services Businesses and the Closed Block Business, and had two classes of common stock outstanding. The Common Stock, which is publicly-traded (NYSE:PRU), reflected the performance of the Financial Services Businesses, while the Class B Stock, which was issued through a private placement and did not trade on any exchange, reflected the performance of the Closed Block Business.

On January 2, 2015, Prudential Financial repurchased and canceled all of the shares of the Class B Stock (the "Class B Repurchase"). As a result, earnings per share of Common Stock for the year ended December 31, 2015 reflect the consolidated earnings of Prudential Financial. In addition, we no longer organize our principal operations into the Financial Services Businesses and the Closed Block Business. Our principal operations are comprised of four divisions, which together encompass seven segments, and our Corporate and Other operations. The U.S. Retirement Solutions and Investment Management division consists of our Individual Annuities, Retirement and Asset Management segments. The U.S. Individual Life and Group Insurance division consists of our Individual Life and Group Insurance segments. The International Insurance division consists of our International Insurance segment. The Closed Block division consists of our Closed Block segment, which includes certain in force participating insurance and annuity products and corresponding assets that are used for the payment of benefits and policyholders' dividends on these products (the "Closed Block"), as well as certain related assets and liabilities. The Closed Block segment is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations. Our Corporate and Other operations include corporate items and initiatives that are not allocated to business segments and businesses that have been or will be divested.

As a result of the Class B Repurchase and resulting elimination of the separation of the Financial Services Businesses and the Closed Block Business, in this Annual Report we refer to the divisions and segments of the Company that formerly comprised the Financial Services Businesses as "PFI excluding the Closed Block division" and we refer to the operations that were formerly included in the Closed Block Business as the "Closed Block division," except as otherwise noted. Closed Block Business results were associated with the Company's Class B Stock for periods prior to January 1, 2015.

## SELECTED FINANCIAL DATA

We derived the selected consolidated income statement data for the years ended December 31, 2016, 2015 and 2014, and the selected consolidated balance sheet data as of December 31, 2016 and 2015, from our Consolidated Financial Statements included elsewhere herein. We derived the selected consolidated income statement data for the years ended December 31, 2013 and 2012, and the selected consolidated balance sheet data as of December 31, 2014, 2013 and 2012, from consolidated financial statements not included herein.

See Note 3 to the Consolidated Financial Statements for a discussion of acquisitions and dispositions during 2016, 2015 and 2014.
Results for the year ended December 31, 2012, included approximately $\$ 32$ billion of premiums reflecting two significant pension risk transfer transactions. On November 1, 2012, we issued a non-participating group annuity contract to the General Motors Salaried Employees Pension Trust, and assumed responsibility for providing specified benefits to certain participants. On December 10, 2012, we issued a non-participating group annuity contract to the Verizon Management Pension Plan and assumed responsibility for providing specified benefits to certain participants. The premiums from these transactions were largely offset by a corresponding increase in policyholders' benefits, including the change in policy reserves.

Our Gibraltar Life operations use a November 30 fiscal year end. Consolidated balance sheet data as of December 31, 2016, 2015, 2014, 2013 and 2012, include Gibraltar Life assets and liabilities as of November 30 for each respective year. Consolidated income statement data for the years ended December 31, 2016, 2015, 2014, 2013 and 2012, include Gibraltar Life results for the twelve months ended November 30 for each respective year.

This selected consolidated financial information should be read in conjunction with our Management's Discussion and Analysis of Financial Condition and Results of Operations and Consolidated Financial Statements included elsewhere herein.

|  |  | Year E | ded Dece | er 31, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 | 2013 | 2012 |
|  | (in millio | except $p$ | share an | ratio inf | rmation) |
| Income Statement Data: |  |  |  |  |  |
| Revenues: |  |  |  |  |  |
| Premiums | \$30,964 | \$28,521 | \$29,293 | \$26,237 | \$65,354 |
| Policy charges and fee income | 5,906 | 5,972 | 6,179 | 5,415 | 4,489 |
| Net investment income | 15,520 | 14,829 | 15,256 | 14,729 | 13,661 |
| Asset management and service fees | 3,752 | 3,772 | 3,719 | 3,485 | 3,053 |
| Other income (loss) | 443 | 0 | $(1,978)$ | $(3,199)$ | (269) |
| Realized investment gains (losses), net | 2,194 | 4,025 | 1,636 | $(5,206)$ | $(1,441)$ |
| Total revenues | 58,779 | 57,119 | 54,105 | 41,461 | 84,847 |
| Benefits and expenses: |  |  |  |  |  |
| Policyholders' benefits | 33,632 | 30,627 | 31,587 | 26,733 | 65,131 |
| Interest credited to policyholders' account balances | 3,761 | 3,479 | 4,263 | 3,111 | 4,234 |
| Dividends to policyholders | 2,025 | 2,212 | 2,716 | 2,050 | 2,176 |
| Amortization of deferred policy acquisition costs | 1,877 | 2,120 | 1,973 | 240 | 1,504 |
| General and administrative expenses | 11,779 | 10,912 | 11,807 | 11,011 | 11,094 |
| Total benefits and expenses | 53,074 | 49,350 | 52,346 | 43,145 | 84,139 |
| Income (loss) from continuing operations before income taxes and equity in earnings of operati joint ventures | 5,705 | 7,769 | 1,759 | $(1,684)$ | 708 |
| Total income tax expense (benefit) | 1,335 | 2,072 | 349 | $(1,058)$ | 213 |
| Income (loss) from continuing operations before equity in earnings of operating joint ventures | 4,370 | 5,697 | 1,410 | (626) | 495 |
| Equity in earnings of operating joint ventures, net of taxes | 49 | 15 | 16 | 59 | 60 |
| Income (loss) from continuing operations | 4,419 | 5,712 | 1,426 | (567) | 555 |
| Income (loss) from discontinued operations, net of taxes | 0 | 0 | 12 | 7 | 15 |
| Net income (loss) | 4,419 | 5,712 | 1,438 | (560) | 570 |
| Less: Income (loss) attributable to noncontrolling interests | 51 | 70 | 57 | 107 | 50 |
| Net income (loss) attributable to Prudential Financial, Inc. | \$ 4,368 | \$ 5,642 | \$ 1,381 | \$ (667) | \$ 520 |


| Year Ended December 31, |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 2016 | 2015 | 2014 | 2013 | $\underline{2012}$ |

(in millions, except per share and ratio information)

## EARNINGS PER SHARE(1)

## Basic earnings per share-Common Stock:

| Income (loss) from continuing operations attributable to Prudential Financial, Inc. | \$ | 9.85 |  | 12.37 | \$ | 3.23 | \$ | (1.57) | \$ | 1.02 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income (loss) from discontinued operations, net of taxes |  | 0.00 |  | 0.00 |  | 0.02 |  | 0.02 |  | 0.04 |
| Net income (loss) attributable to Prudential Financial, Inc. | \$ | 9.85 |  | 12.37 | \$ | 3.25 | \$ | (1.55) | \$ | 1.06 |
| Diluted earnings per share-Common Stock: |  |  |  |  |  |  |  |  |  |  |
| Income (loss) from continuing operations attributable to Prudential Financial, Inc. | \$ | 9.71 | \$ | 12.17 | \$ | 3.20 | \$ | (1.57) | \$ | 1.01 |
| Income (loss) from discontinued operations, net of taxes |  | 0.00 |  | 0.00 |  | 0.03 |  | 0.02 |  | 0.04 |
| Net income (loss) attributable to Prudential Financial, Inc. | \$ | 9.71 |  | 12.17 | \$ | 3.23 | \$ | (1.55) | \$ | 1.05 |
| dends declared per share-Common Stock | \$ | 2.80 | \$ | 2.44 | \$ | 2.17 | \$ | 1.73 | \$ | 1.60 |
| of earnings to fixed charges(2) |  | 2.10 |  | 2.64 |  | 1.25 |  | 0.00 |  | 1.11 |

As of December 31,

| 2016 | 2015 | 2014 | 2013 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| (in millions) |  |  |  |  |
| \$432,485 | \$405,535 | \$408,274 | \$386,407 | \$394,007 |
| 287,636 | 285,570 | 296,435 | 285,060 | 253,254 |
| 783,962 | 757,255 | 766,526 | 731,638 | 709,084 |
| 386,113 | 361,168 | 353,916 | 343,516 | 350,463 |
| 287,636 | 285,570 | 296,435 | 285,060 | 253,254 |
| 1,133 | 1,216 | 3,839 | 2,668 | 2,484 |
| 18,041 | 19,594 | 19,702 | 23,411 | 24,578 |
| 737,874 | 715,332 | 724,177 | 695,757 | 669,972 |
| 45,863 | 41,890 | 41,770 | 35,278 | 38,503 |
| 225 | 33 | 579 | 603 | 609 |
| \$ 46,088 | \$ 41,923 | \$ 42,349 | \$ 35,881 | \$ 39,112 |

(1) For 2016 and 2015, represents consolidated earnings per share of Common Stock. For 2014, 2013, and 2012, represents earnings of the Company's former Financial Services Businesses per share of Common Stock.
(2) For purposes of this computation, earnings are defined as income from continuing operations before income taxes excluding undistributed income (loss) from equity method investments, fixed charges and interest capitalized. Also excludes earnings attributable to noncontrolling interests. Fixed charges are the sum of gross interest expense, interest credited to policyholders' account balances and an estimated interest component of rent expense. Due to the Company's loss for the year ended December 31, 2013, the ratio coverage was less than $1: 1$ and is therefore not presented. Additional earnings of $\$ 1,935$ million would have been required for the year ended December 31, 2013 to achieve a ratio of $1: 1$.
(3) Prior periods are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-03 which was effective January 1, 2016.

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

You should read the following analysis of our consolidated financial condition and results of operations in conjunction with the "Forward-Looking Statements," "Selected Financial Data" and the "Consolidated Financial Statements" included in this Annual Report, as well as the "Risk Factors" included in Prudential Financial's 2016 Annual Report on Form 10-K.

## Overview

From December 18, 2001, the date of demutualization, through December 31, 2014, we organized our principal operations into the Financial Services Businesses and the Closed Block Business, and had two classes of common stock outstanding. The Common Stock, which is publicly traded (NYSE:PRU), reflected the performance of the Financial Services Businesses, while the Class B Stock, which was issued through a private placement and did not trade on any exchange, reflected the performance of the Closed Block Business.

On January 2, 2015, Prudential Financial repurchased and canceled all of the shares of the Class B Stock (the "Class B Repurchase"). As a result, earnings per share of Common Stock for the year ended December 31, 2015 reflect the consolidated earnings of Prudential Financial. In addition, we no longer organize our principal operations into the Financial Services Businesses and the Closed Block Business. Our principal operations are comprised of four divisions, which together encompass seven segments, and our Corporate and Other operations. The U.S. Retirement Solutions and Investment Management division consists of our Individual Annuities, Retirement and Asset Management segments. The U.S. Individual Life and Group Insurance division consists of our Individual Life and Group Insurance segments. The International Insurance division consists of our International Insurance segment. The Closed Block division consists of our Closed Block segment. The Closed Block division is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations. Our Corporate and Other operations include corporate items and initiatives that are not allocated to business segments and businesses that have been or will be divested.

As a result of the Class B Repurchase and resulting elimination of the separation of the Financial Services Businesses and the Closed Block Business, in this MD\&A we refer to the divisions and segments of the Company that formerly comprised the Financial Services Businesses as "PFI excluding the Closed Block division" and we refer to the operations that were formerly included in the Closed Block Business as the "Closed Block division," except as otherwise noted. Closed Block Business results were associated with the Company's Class B Stock for periods prior to January 1, 2015.

## Revenues and Expenses

We earn our revenues principally from insurance premiums; mortality, expense, asset management and administrative fees from insurance and investment products; and investment of general account and other funds. We earn premiums primarily from the sale of certain individual life insurance, group life and disability insurance, retirement and annuity contracts. We earn mortality, expense, and asset management fees primarily from the sale and servicing of separate account products including variable life insurance and variable annuities, and from the sale and servicing of other products including universal life insurance. We also earn asset management and administrative fees from the distribution, servicing and management of mutual funds, retirement products and other asset management products and services. Our operating expenses principally consist of insurance benefits provided and reserves established for anticipated future insurance benefits, general business expenses, dividends to policyholders, commissions and other costs of selling and servicing our products and interest credited on general account liabilities.

## Profitability

Our profitability depends principally on our ability to price our insurance and annuity products at a level that enables us to earn a margin over the costs associated with providing benefits and administering those products. Profitability also depends on, among other items, our actuarial and policyholder behavior experience on insurance and annuity products, and our ability to attract and retain customer assets, generate and maintain favorable investment results, effectively deploy capital and utilize our tax capacity, and manage expenses.

Historically, the participating products included in the Closed Block have yielded lower returns on capital invested than many of our other businesses. As we have ceased offering domestic participating products, we expect that the proportion of the traditional participating products in our in force business will gradually diminish as these older policies age, and we grow other businesses. However, the relatively lower returns to us on this existing block of business will continue to affect our consolidated results of operations for many years.

See "Risk Factors" included in Prudential Financial's 2016 Annual Report on Form 10-K for a discussion of risks that have affected and may affect in the future our business, results of operations or financial condition, or cause our actual results to differ materially from those expected or those expressed in any forward-looking statements made by or on behalf of the Company.

## Executive Summary

## Industry Trends

Our U.S. and international businesses are impacted by financial markets, economic conditions, regulatory oversight, and a variety of trends that affect the industries where we compete.

## U.S. Businesses

Financial and Economic Environment. Global market conditions and uncertainty continue to be factors in the markets in which we operate. As discussed further under "Impact of a Low Interest Rate Environment" below, interest rates in the U.S. remain lower than historical levels, which continue to negatively impact our portfolio income yields and our net investment spread results.

Regulatory Environment. See "Business—Regulation" included in Prudential Financial's 2016 Annual Report on Form 10-K for a discussion of regulatory developments that may impact the Company, including the Dodd-Frank Wall Street Reform and Consumer Protection Act, the U.S. Department of Labor's new fiduciary rules and potential changes in U.S. tax legislation. See "Risk FactorsRegulatory and Legal Risks" included in Prudential Financial's 2016 Annual Report on Form 10-K for a discussion of the risks associated with these and other developments.

Demographics. Customer demographics continue to evolve and new opportunities present themselves in different consumer segments such as the millennial and multicultural markets. Consumer expectations and preferences are changing. We believe existing customers and potential customers are increasingly looking for cost-effective solutions that they can easily understand and access through technology-enabled devices. At the same time, income protection, wealth accumulation and the needs of retiring baby boomers are continuing to shape the insurance industry. A persistent retirement security gap exists in terms of both savings and protection. Despite the ongoing phenomenon of the risk and responsibility of retirement savings shifting from employers to employees, employers are becoming increasingly focused on the financial wellness of the individuals they employ. Although life insurance ownership among U.S. households remains low, with consumers citing other financial priorities and cost of insurance as reasons for the lack of coverage, consumer awareness of the value proposition that life insurance provides is believed to be on the rise.

Competitive Environment. See "Business-Competition," "Business-U.S. Retirement Solutions and Investment Management Division" and "Business-U.S. Individual Life and Group Insurance Division" included in Prudential Financial's 2016 Annual Report on Form $10-\mathrm{K}$ for a discussion of the competitive environment and the basis on which we compete.

## International Businesses

Financial and Economic Environment. Our international insurance operations, especially in Japan, continue to operate in a low interest rate environment. Although the local market in Japan has adapted to low interest rates, as discussed under "Impact of a Low Interest Rate Environment" below, the current reinvestment yields for certain blocks of business in our international insurance operations are now generally lower than the current portfolio yield supporting these blocks of business, which may negatively impact our net investment spread results. The continued low interest rate environment in the U.S. may also impact the relative attractiveness of U.S. dollar-denominated products to yen-denominated products in Japan. In addition, we are subject to financial impacts associated with movements in foreign currency rates, particularly the Japanese yen. Fluctuations in the value of the yen will continue to impact the relative attractiveness of both yen-denominated and non-yen denominated products.

Regulatory Environment. See "Business—Regulation" and "Risk Factors—Regulatory and Legal Risks" included in Prudential Financial's 2016 Annual Report on Form 10-K for a discussion of regulatory developments that may impact the Company and associated risks.

Demographics. Japan has an aging population as well as a large pool of household assets invested in low-yielding deposit and savings vehicles. The aging of Japan's population, along with strains on government pension programs, have led to a growing demand for insurance products with a significant savings element to meet savings and retirement needs as the population prepares for retirement. We are seeing a similar shift to retirement-oriented products across other Asian markets, including Korea and Taiwan, each of which also has an aging population.

Competitive Environment. See "Business-Competition," and "Business-International Insurance Division" included in Prudential Financial's 2016 Annual Report on Form 10-K for a discussion of the competitive environment and the basis on which we compete.

## Impact of a Low Interest Rate Environment

## U.S. Operations excluding the Closed Block Division

Interest rates in the U.S. continue to remain lower than historical levels, despite the Federal Reserve Board's decision to raise shortterm interest rates in December 2016. Market conditions and events, including but not limited to the United Kingdom ("U.K.") referendum to leave the European Union contrasted with strengthening economic growth and job creation, make uncertain the timing and amount of future monetary policy decisions by the Federal Reserve. Given this current low rate environment, our current reinvestment yields continue to be lower than the overall portfolio yield, primarily for our investments in fixed maturity securities and commercial mortgage loans and, as a result, our overall portfolio yields are expected to continue to decline.

For the general account supporting our U.S. Retirement Solutions and Investment Management division, our U.S. Individual Life and Group Insurance division and our Corporate and Other operations, we expect annual scheduled payments and prepayments to be approximately $10 \%$ of the fixed maturity security and commercial mortgage loan portfolios through 2018. The general account for these operations has approximately $\$ 183$ billion of such assets (based on net carrying value) as of December 31, 2016. As these assets mature, the average portfolio yield for fixed maturities and commercial mortgage loans of approximately $4.5 \%$, as of December 31, 2016, is expected to decline due to reinvesting in a lower interest rate environment.

Included in the $\$ 183$ billion of fixed maturity securities and commercial mortgage loans are approximately $\$ 92$ billion that are subject to call or redemption features at the issuer's option and have a weighted average interest rate of approximately $5 \%$. Of this $\$ 92$ billion, approximately $70 \%$ contains provisions for prepayment premiums. The reinvestment of scheduled payments at rates below the current portfolio yield, including in some cases at rates below those guaranteed under our insurance contracts, will impact future operating results to the extent we do not, or are unable to, reduce crediting rates on in force blocks of business, or effectively utilize other asset/liability management strategies described below, in order to maintain current net interest margins.

As of December 31, 2016, these operations have approximately $\$ 180$ billion of insurance liabilities and policyholder account balances. Of this amount, approximately $\$ 110$ billion represents long duration products such as group annuities, structured settlements and other insurance products that have fixed and guaranteed terms, for which underlying assets may have to be reinvested at interest rates that are lower than portfolio rates. We seek to mitigate the impact of a prolonged low interest rate environment on these contracts through asset/ liability management, as discussed further below.

The $\$ 180$ billion of insurance liabilities and policyholder account balances also includes approximately $\$ 55$ billion related to contracts with crediting rates that may be adjusted over the life of the contract, subject to guaranteed minimums. Although we may have the ability to lower crediting rates for those contracts above guaranteed minimums, our willingness to do so may be limited by competitive pressures.

The following table sets forth the related account values by range of guaranteed minimum crediting rates and the related range of the difference, in basis points ("bps"), between rates being credited to contractholders as of December 31, 2016, and the respective guaranteed minimums.

|  | Account Values with Adjustable Crediting Rates Subject to Guaranteed Minimums: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\substack{\text { At } \\ \text { guaranteed } \\ \text { minimum }}}{ }$ | 1-49 bps above guaranteed minimum | 50-99 bps above guaranteed minimum | 100-150 bps above guaranteed minimum | $\begin{aligned} & \hline \text { Greater than } \\ & 150 \\ & \text { bps above } \\ & \text { guaranteed } \\ & \text { minimum } \end{aligned}$ | Total |
|  | (\$ in billions) |  |  |  |  |  |
| Range of Guaranteed Minimum Crediting Rates: |  |  |  |  |  |  |
| Less than 1.00\% | \$ 0.6 | \$ 0.9 | \$0.3 | \$0.0 | \$0.0 | \$ 1.8 |
| 1.00\%-1.99\% | 1.8 | 12.5 | 3.0 | 1.2 | 0.1 | 18.6 |
| 2.00\%-2.99\% | 2.0 | 0.5 | 1.8 | 1.1 | 0.1 | 5.5 |
| 3.00\%-4.00\% | 27.4 | 0.5 | 0.2 | 0.1 | 0.0 | 28.2 |
| Greater than 4.00\% | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| Total(1) . | \$32.6 | \$14.4 | \$5.3 | \$2.4 | \$0.2 | \$54.9 |
| Percentage of total | 60\% | 26\% | 10\% | 4\% | 0\% | 100\% |

(1) Includes approximately $\$ 1.2$ billion related to contracts that impose a market value adjustment if the invested amount is not held to maturity.

The remaining $\$ 15$ billion of the $\$ 180$ billion of insurance liabilities and policyholder account balances in these operations represent participating contracts for which the investment income risk is expected to ultimately accrue to contractholders. The crediting rates for these contracts are periodically adjusted based on the return earned on the related assets.

Assuming a hypothetical scenario where the average 10-year U.S. Treasury rate is $2.45 \%$ for the period from January 1, 2017 through December 31, 2018, and credit spreads remain unchanged from levels as of December 31, 2016, we estimate that the unfavorable impact to net interest margins included in pre-tax adjusted operating income of reinvesting in such an environment, compared to reinvesting at current average portfolio yields, would be approximately $\$ 9$ million in 2017 and $\$ 26$ million in 2018. This impact is most significant in the Retirement, Individual Life and Individual Annuities segments. This hypothetical scenario only reflects the impact related to the approximately $\$ 55$ billion of contracts shown in the table above, and does not reflect: any benefit from potential changes to the crediting rates on the corresponding contractholder liabilities where the Company has the contractual ability to do so, or other potential mitigants such as changes in investment mix that we may implement as funds are reinvested; any impact related to assets that do not directly support our liabilities; any impact from other factors, including but not limited to, new business, contractholder behavior, product modifications, changes in product offerings, changes in competitive conditions or changes in capital markets; or any impact from other factors described below. See "-Segment Measures" for a discussion of adjusted operating income and its use as a measure of segment operating performance.

In order to mitigate the unfavorable impact that the current interest rate environment has on our net interest margins, we employ a proactive asset/liability management program, which includes strategic asset allocation and hedging strategies within a disciplined risk management framework. These strategies seek to match the characteristics of our products, and to closely approximate the interest rate sensitivity of the assets with the estimated interest rate sensitivity of the product liabilities. Our asset/liability management program also helps manage duration gaps, currency and other risks between assets and liabilities through the use of derivatives. We adjust this dynamic process as products change, as customer behavior changes and as changes in the market environment occur. As a result, our asset/liability management process has permitted us to manage the interest rate risk associated with our products through several market cycles. Our interest rate exposure is also mitigated by our business mix, which includes lines of business for which fee-based and insurance underwriting earnings play a more prominent role in product profitability.

## Closed Block Division

Substantially all of the $\$ 60$ billion of general account assets in the Closed Block division support obligations and liabilities relating to the Closed Block policies only. See Note 12 to the Consolidated Financial Statements for further information on the Closed Block.

## International Insurance Operations

While our international insurance operations have experienced a low interest rate environment for many years, the current reinvestment yields for certain blocks of business in our largest international insurance operations are generally lower than the current
portfolio yield supporting these blocks of business. Recently, the Bank of Japan has been pursuing further expansionary monetary policy resulting in even lower and, at times, negative yields for certain tenors of government bonds. Our international insurance operations employ a proactive asset/liability management program in order to mitigate, to the extent possible, the unfavorable impact that the current interest rate environment has on our net interest margins. In conjunction with this program, we have not purchased negative yielding assets to support the portfolio and we continue to purchase long-term bonds with tenors of 30 years or greater that carry positive yields. Additionally, our diverse product portfolio in terms of currency mix and premium payment mode allows us to further mitigate the negative impact from this low interest rate environment. We regularly examine our yen-based product offerings and their profitability. As a result, we have repriced certain products, adjusted commissions for certain products and have discontinued sales of other products that do not meet our profit expectations. The impact of these actions, coupled with the strengthening of the yen against the U.S. dollar and introduction of certain new products, has resulted in an increase in sales of U.S. dollar-denominated products relative to products denominated in other currencies. For additional information on sales within our international insurance operations, see "-International Insurance DivisionInternational Insurance-Sales Results," below.

As of December 31, 2016, our Japanese operations have $\$ 148$ billion of insurance liabilities and policyholder account balances. Of this amount, approximately $\$ 117$ billion is predominantly comprised of long-duration insurance products that have fixed and guaranteed terms, for which underlying assets may have to be reinvested at interest rates that are lower than portfolio rates. The remaining insurance liabilities and policyholder account balances include $\$ 23$ billion related to contracts that impose a market value adjustment if the invested amount is not held to maturity and $\$ 8$ billion related to contracts with crediting rates that may be adjusted over the life of the contract, subject to guaranteed minimums. However, for these contracts, most of the current crediting rates are at or near contractual minimums. Although we have the ability to lower crediting rates in some cases for those contracts that are above guaranteed minimum crediting rates, the majority of this business has interest crediting rates that are determined by formula.

Assuming a hypothetical scenario within our Japanese and Korean operations where 2017 new money yields would be 25 basis points lower than projected, and applying these lower new money yields to annualized investment of renewal premiums, proceeds from investment disposition and reinvestment of investment income, we estimate that the unfavorable impact to net interest margins would reduce adjusted operating income in 2017 by approximately $\$ 10$ to $\$ 15$ million. This hypothetical scenario excludes first-year single premium and multi-currency fixed annuity cash flows, any potential benefit from repricing products, and any impact from other factors, including but not limited to new business, contractholder behavior, changes in competitive conditions, changes in capital markets, and the effect of derivative instruments.

## Outlook

Management expects that results in 2017 will continue to benefit from our complementary mix of high quality Protection, Retirement and Asset Management businesses. This business mix provides a diversity in earnings sources, which helps offset variability in business results or fluctuations in market conditions, while offering growth opportunities. While challenges exist in the form of a low interest rate environment (see "Impact of a Low Interest Rate Environment"), the near-term impacts of strategic investment spending (see further below) and an evolving regulatory environment (see "Business-Regulation" included in Prudential Financial's 2016 Annual Report on Form 10-K), we expect that our choice of businesses coupled with strong execution will produce attractive returns. In addition, outlook considerations for each of our divisions include the following:

- U.S. Retirement and Investment Management Market. We will seek to continue our established leadership position in providing retirement and investment solutions for a U.S. market that is increasingly demanding cost-effective solutions that can be easily understood and accessed through technology-enabled distribution methods. There continues to be uncertainty around the impact the DOL fiduciary rule will have on sales and flows. However, we expect to benefit from our product diversification strategy and to improve our risk profile while meeting a broad range of client needs through ongoing product innovation. Our Individual Annuities business remains focused on helping its customers meet their investment and retirement needs. The recapture of living benefit risks from our reinsurance captive to our statutory insurance entities along with our enhanced risk management strategies are expected to contribute to higher free cash flows and improved capital stability, while also providing an ongoing benefit to our operating results. In our Retirement business we continue to provide products that respond to the needs of plan sponsors to manage risk and control their benefit costs, while ensuring we maintain appropriate pricing and return expectations under changing market conditions. We believe there are growth opportunities in pension risk transfer as companies are becoming more aware of the potential impact of longevity risk and higher Pension Benefit Guaranty Corporation premiums, although we expect growth will not be linear given the episodic nature of larger cases. While we continue to see fee and spread compression, we believe these are manageable headwinds. Our Asset Management business, or PGIM, is focused on meeting clients' evolving needs and capturing opportunities in the marketplace. We are making substantial investments in our multi-manager model as well as in our talent, infrastructure and other distribution capabilities in order to capitalize on a business that we believe has strong growth opportunities.
- U.S. Insurance Market. We will continue to focus on writing high-quality business and expect to continue to benefit from expansion of our distribution channels and deepening our relationships with third-party distributors. Our Individual Life business is continuing to execute on its product diversification strategy in order to maintain a diversified product mix and an attractive risk profile. We are expanding the reach of our multichannel distribution network, including the Prudential Advisors channel, and are building predictive underwriting and other capabilities. In our Group Insurance business, we are seeing benefits from our multi-year underwriting efforts, especially in disability, and we are expanding our market segment focus to include mid-market clients. We are also continuing to focus on rigorous expense management, with an objective of further improving our return prospects over time.
- International Markets. We will continue to concentrate on deepening our presence in Japan and other markets in which we currently operate and expanding our distribution capabilities in emerging markets. Our death protection products with returns largely driven by mortality or expense margins help mitigate exposure of results to interest rates. We will continue to take steps to re-price or in some cases suspend sales of products most effected by low and negative rates in Japan. With regard to distribution, we are seeking modest growth in our Life Planner and Life Consultant count in Japan, as well as expansion of our third-party distribution networks. Furthermore, we have newer markets that we seek to develop in order to contribute more meaningfully to our growth over time, such as our insurance operation in Brazil, which we have built organically, and our investment in a leading provider of retirement services in Chile.

In order to capitalize on the growth opportunities in our domestic and international markets highlighted above, we continue to make investments in and across our businesses. We are investing in expanding our distribution capabilities through a focus on customer experience and technology enabled advice and distribution, cross-business collaboration, further development of work site relationships with individuals and expanding our ability to offer relevant products and services to customers through whichever channels they choose. We are also investing in product innovation, through the use of data and digital initiatives to better understand and serve the needs of a customer base with changing demographics, to achieve a goal of offering a broader array of cost effective and easily comprehensible products. In addition, we are making investments in our information technology infrastructure in order to streamline processes and enhance the effectiveness of our administrative systems.

While we expect these strategic investments to ultimately generate business growth, they will result in elevated expenses in the nearterm. In addition, we expect the time periods required for these investments to generate returns to vary. These investments are being funded through a combination of operating cost efficiencies and the returns generated by our businesses, and we expect to be able to continue to absorb some of these investment costs through efficiency gains.

## Results of Operations

## Consolidated Results of Operations

The following table summarizes net income (loss) for the periods presented.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Revenues | \$58,779 | \$57,119 | \$54,105 |
| Benefits and expenses | 53,074 | 49,350 | 52,346 |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | 5,705 | 7,769 | 1,759 |
| Income tax expense (benefit) | 1,335 | 2,072 | 349 |
| Income (loss) from continuing operations before equity in earnings of operating joint ventures | 4,370 | 5,697 | 1,410 |
| Equity in earnings of operating joint ventures, net of taxes | 49 | 15 | 16 |
| Income (loss) from continuing operations | 4,419 | 5,712 | 1,426 |
| Income (loss) from discontinued operations, net of taxes . | 0 | 0 | 12 |
| Net income (loss) | 4,419 | 5,712 | 1,438 |
| Less: Income attributable to noncontrolling interests | 51 | 70 | 57 |
| Net income (loss) attributable to Prudential Financial, Inc. | \$ 4,368 | \$ 5,642 | \$ 1,381 |

2016 to 2015 Annual Comparison. The decrease in "Income (loss) from continuing operations" reflected the following notable items:

- $\$ 980$ million unfavorable variance, on a pre-tax basis, from adjustments to DAC and other costs as well as reserves, reflecting updates to the estimated profitability of our businesses, including the impact of our annual reviews and update of assumptions and other refinements. This excludes the impact associated with the variable annuity hedging program discussed below (see "-Results of Operations by Segment—U.S. Retirement Solutions and Investment Management Division—Individual Annuities" for additional information);
- $\$ 972$ million unfavorable variance, on a pre-tax basis, reflecting our decision to manage a portion of our interest rate risk through our Capital Protection Framework (see "-Results of Operations by Segment-Corporate and Other-Capital Protection Framework" for additional information); and
- $\$ 479$ million lower net pre-tax realized gains for PFI excluding the Closed Block division, and excluding the impact of the hedging program associated with certain variable annuities, which is discussed below (see "-Realized Investment Gains (Losses)" for additional information).

Partially offsetting these decreases in "Income (loss) from continuing operations" were the following items:

- $\$ 737$ million favorable impact of lower tax expense reflecting lower pre-tax income in 2016 compared to 2015; and
- $\$ 660$ million favorable variance, on a pre-tax basis, reflecting the net impact from changes in the value of our embedded derivatives and related hedge positions associated with certain variable annuities and other products (see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division—Individual Annuities—Variable Annuity Risks and Risk Mitigants" for additional information).

2015 to 2014 Annual Comparison. The increase in "Income (loss) from continuing operations" reflected the following notable items:

- $\$ 3,136$ million higher net pre-tax earnings primarily resulting from the 2014 impact of foreign currency exchange rate movements on certain assets and liabilities within our Japanese insurance operations (see "-Impact of Foreign Currency Exchange RatesImpact of products denominated in non-local currencies on U.S. GAAP earnings" for additional information);
- $\$ 3,041$ million favorable variance, on a pre-tax basis, reflecting our decision to manage a portion of our interest rate risk through our Capital Protection Framework (see "-Results of Operations by Segment-Corporate and Other-Capital Protection Framework" for additional information);
- $\$ 615$ million favorable variance, on a pre-tax basis, reflecting the net impact from changes in the value of our embedded derivatives and related hedge positions associated with certain variable annuities (see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division-Individual Annuities-Variable Annuity Risks and Risk Mitigants" for additional information); and
- $\$ 558$ million favorable variance, on a pre-tax basis, from adjustments to DAC and other costs as well as reserves, reflecting updates to the estimated profitability of our businesses, including the impact of our annual reviews and update of assumptions and other refinements performed in the second quarter of 2015 and the third quarter of 2014. This excludes the impact associated with the variable annuity hedging program discussed above (see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division-Individual Annuities" for additional information).

Partially offsetting these increases in "Income (loss) from continuing operations" were the following items:

- $\$ 1,723$ million unfavorable impact of higher tax expense reflecting higher pre-tax income in 2015 compared to 2014; and
- $\$ 1,436$ million lower net pre-tax realized gains for PFI excluding the Closed Block division, and excluding the impact of the hedging program associated with certain variable annuities discussed above (see "-Realized Investment Gains (Losses)" for additional information).


## Segment Results of Operations

We analyze the performance of our segments and Corporate and Other operations using a measure of segment profitability called adjusted operating income. As discussed in "-Overview," for the year ended December 31, 2015 and onward, the Closed Block division is accounted for as a divested business under our definition of adjusted operating income. For the year ended December 31, 2014, the former Closed Block Business was analyzed using accounting principles generally accepted in the United States of America ("U.S. GAAP"). Its results are excluded from adjusted operating income under both the current reporting for the Closed Block division and the former reporting for the Closed Block Business. See "-Segment Measures" for a discussion of adjusted operating income and its use as a measure of segment operating performance.

Shown below are the adjusted operating income contributions of each segment and Corporate and Other operations for the periods indicated and a reconciliation of this segment measure of performance to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" as presented in our Consolidated Statements of Operations.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Adjusted operating income before income taxes by segment: |  |  |  |
| Individual Annuities | \$ 1,765 | \$ 1,797 | \$ 1,467 |
| Retirement | 1,012 | 931 | 1,215 |
| Asset Management | 787 | 779 | 785 |
| Total U.S. Retirement Solutions and Investment Management division | 3,564 | 3,507 | 3,467 |
| Individual Life | 79 | 635 | 498 |
| Group Insurance | 220 | 176 | 23 |
| Total U.S. Individual Life and Group Insurance division | 299 | 811 | 521 |
| International Insurance | 3,117 | 3,226 | 3,252 |
| Total International Insurance division | 3,117 | 3,226 | 3,252 |
| Corporate and Other operations | $(1,581)$ | $(1,313)$ | $(1,348)$ |
| Total Corporate and Other | $(1,581)$ | $(1,313)$ | $(1,348)$ |
| Total segment adjusted operating income before income taxes | 5,399 | 6,231 | 5,892 |
| Reconciling Items: |  |  |  |
| Realized investment gains (losses), net, and related adjustments(1) | 989 | 2,258 | $(3,588)$ |
| Charges related to realized investment gains (losses), net(2) ..... | (466) | (679) | (542) |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net(3) | (17) | (524) | 339 |
| Change in experience-rated contractholder liabilities due to asset value changes(4) | 21 | 433 | (294) |
| Divested businesses: |  |  |  |
| Closed Block division(5) | (132) | 58 | 0 |
| Other divested businesses(6) | (84) | (66) | 167 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests(7) | (5) | 58 | 44 |
| Subtotal(8) | 5,705 | 7,769 | 2,018 |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures for Closed Block Business(9) | 0 | 0 | (259) |
| Consolidated income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | \$ 5,705 | \$7,769 | \$ 1,759 |

(1) Represents "Realized investment gains (losses), net," and related adjustments. See "-Realized Investment Gains and Losses" and Note 22 to our Consolidated Financial Statements for additional information.
(2) Includes charges that represent the impact of realized investment gains (losses), net, on the amortization of DAC and other costs, and on changes in reserves. Also includes charges resulting from payments related to market value adjustment features of certain of our annuity products and the impact of realized investment gains (losses), net, on the amortization of unearned revenue reserves.
(3) Represents net investment gains (losses) on trading account assets supporting insurance liabilities. See "-Experience-Rated Contractholder Liabilities, Trading Account Assets Supporting Insurance Liabilities and Other Related Investments."
(4) Represents changes in contractholder liabilities due to asset value changes in the pool of investments supporting these experience-rated contracts. See "-Experience-Rated Contractholder Liabilities, Trading Account Assets Supporting Insurance Liabilities and Other Related Investments."
(5) As a result of the Class B Repurchase, for the years ended December 31, 2016 and 2015, the Closed Block, along with certain related assets and liabilities, comprises the Closed Block division, which is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations.
(6) See "-Divested Businesses."
(7) Equity in earnings of operating joint ventures are included in adjusted operating income but excluded from income from continuing operations before income taxes and equity in earnings of operating joint ventures as they are reflected on an after-tax U.S. GAAP basis as a separate line in our Consolidated Statements of Operations. Earnings attributable to noncontrolling interests are excluded from adjusted operating income but included in income from continuing operations before taxes and equity earnings of operating joint ventures as they are reflected on a U.S. GAAP basis as a separate line in our Consolidated Statements of Operations. Earnings attributable to noncontrolling interests represent the portion of earnings from consolidated entities that relates to the equity interests of minority investors.
(8) Amounts for the year ended December 31, 2014 represent "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" of the Company's former Financial Services Businesses, reflecting the existence of two classes of common stock and the separate reporting of the Financial Services Businesses and the Closed Block Business for each period.
(9) Reflects the existence of two classes of common stock and the separate reporting of the Company's former Financial Services Businesses and the Closed Block Business for the year ended December 31, 2014.

Segment results for 2016 presented above reflect the following:
Individual Annuities. Segment results for 2016 decreased in comparison to 2015, primarily reflecting lower net asset-based fee income, higher general and administrative expenses, and an unfavorable comparative impact from changes in the estimated profitability of the business, partially offset by higher net investment income, lower amortization costs and interest expense, and the absence of certain costs for contract cancellations incurred in the prior year.

Retirement. Segment results for 2016 increased in comparison to 2015, reflecting higher net investment spread results and a favorable comparative net impact from our annual reviews and update of assumptions, partially offset by a lower contribution from reserve experience, higher general and administrative expenses, net of capitalization, and lower fee income.

Asset Management. Segment results for 2016 increased in comparison to 2015, primarily reflecting higher asset management fees, net of expenses, partially offset by lower other related revenues, net of associated expenses.

Individual Life. Segment results for 2016 decreased in comparison to 2015, primarily reflecting an unfavorable comparative net impact from our annual reviews and update of assumptions, less favorable mortality experience, net of reinsurance, as well as higher general and administrative expenses, partially offset by a higher contribution from investment results.

Group Insurance. Segment results for 2016 increased in comparison to 2015, including a favorable comparative net impact from our annual reviews and update of assumptions. Excluding these items, results increased from 2015 reflecting net favorable underwriting results, higher net investment spread results and lower expenses.

International Insurance. Segment results for 2016 decreased in comparison to 2015, primarily from net unfavorable impacts from foreign currency exchange rates and from our annual reviews and update of assumptions. Excluding these items, segment results increased from the prior year, reflecting the growth of business in force, including the contribution from the Company's investment in AFP Habitat in Chile, and more favorable mortality experience, partially offset by lower contributions from net investment spread results and higher net expenses, including those supporting business growth.

Corporate and Other operations. The results for 2016 in comparison to 2015 reflected increased losses primarily driven by higher levels of corporate expenses, lower net investment income and lower income from our qualified pension plan, partially offset by lower interest expense.

Closed Block Division. The results for 2016 decreased in comparison to 2015, primarily driven by a decrease in net realized investment gains and lower net investment income, partially offset by a decrease in the policyholder dividend obligation and an increase in the net insurance activity results.

## Segment Measures

Adjusted Operating Income. In managing our business, we analyze our segments' operating performance using "adjusted operating income." Adjusted operating income does not equate to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" or "Net income (loss)" as determined in accordance with U.S. GAAP, but is the measure of segment profit or loss we use to evaluate segment performance and allocate resources, and consistent with authoritative guidance, is our measure of segment performance. The adjustments to derive adjusted operating income are important to an understanding of our overall results of operations. Adjusted operating income is not a substitute for income determined in accordance with U.S. GAAP, and our definition of adjusted operating income may differ from that used by other companies. However, we believe that the presentation of adjusted operating income as we measure it for management purposes enhances the understanding of our results of operations by highlighting the results from ongoing operations and the underlying profitability of our businesses. As discussed in "-Segment Results of Operations" above, under both the current reporting for the Closed Block division and the former reporting for the Closed Block Business, its results are excluded from adjusted operating income.

See Note 22 to the Consolidated Financial Statements for further information on the presentation of segment results and our definition of adjusted operating income.

Annualized New Business Premiums. In managing certain of our businesses, we analyze annualized new business premiums, which do not correspond to revenues under U.S. GAAP. Annualized new business premiums measure the current sales performance of the business, while revenues primarily reflect the renewal persistency of policies written in prior years and net investment income, in addition to current sales. Annualized new business premiums include $10 \%$ of first year premiums or deposits from single pay products. No other adjustments are made for limited pay contracts.

The amount of annualized new business premiums for any given period can be significantly impacted by several factors, including but not limited to: addition of new products, discontinuation of existing products, changes in credited interest rates for certain products and other product modifications, changes in tax laws, changes in regulations or changes in the competitive environment. Sales volume may increase or decrease prior to certain of these changes becoming effective, and then fluctuate in the other direction following such changes.

Assets Under Management. In managing our Asset Management business, we analyze assets under management, which do not correspond to U.S. GAAP assets, because the principal source of revenues is fees based on assets under management. Assets under management represents the fair market value or account value of assets which we manage directly for institutional clients, retail clients, and for our general account, as well as assets invested in our products that are managed by third-party managers.

Account Values. In managing our Individual Annuities and Retirement businesses, we analyze account values, which do not correspond to U.S. GAAP assets. Net sales (redemptions) in our Individual Annuities business and net additions (withdrawals) in our Retirement business do not correspond to revenues under U.S. GAAP, but are used as a relevant measure of business activity.

## Impact of Foreign Currency Exchange Rates

## Foreign currency exchange rate movements and related hedging strategies

As a U.S.-based company with significant business operations outside the U.S., particularly in Japan, we are subject to foreign currency exchange rate movements that could impact our U.S. dollar-equivalent earnings and shareholder return on equity. We seek to mitigate this impact through various hedging strategies, including the use of derivative contracts and by holding U.S. dollar-denominated assets in certain of our foreign subsidiaries.

The operations of certain of our businesses are subject to currency fluctuations that could materially affect our U.S. dollar-equivalent earnings from period to period, even if earnings on a local currency basis are relatively constant. We enter into forward currency derivative contracts as part of our strategy to effectively fix the currency exchange rates for a portion of our prospective non-U.S. dollar-denominated earnings streams, thereby reducing earnings volatility from foreign currency exchange rate movements. The forward currency hedging program is primarily associated with our insurance operations in Japan and Korea.

Separately, our Japanese insurance operations offer a variety of non-yen denominated products, primarily comprised of U.S. and Australian dollar-denominated products that are supported by investments in corresponding currencies. While these non-yen denominated assets and liabilities are economically matched, differences in the accounting for changes in the value of these assets and liabilities due to changes in foreign currency exchange rate movements have historically resulted in volatility in reported U.S. GAAP earnings. As a result of continued growth in these portfolios, we implemented a structure in Gibraltar Life in the first quarter of 2015 that disaggregated the U.S. and Australian dollar-denominated businesses into separate divisions, each with its own functional currency that aligns with the underlying products and investments, as described further below under "-Impact of products denominated in non-local currencies on U.S. GAAP earnings."

For further information on the hedging strategies used to mitigate the risks of foreign currency exchange rate movements on earnings as well as the U.S. GAAP earnings impact from products denominated in non-local currencies, see "-Impact of foreign currency exchange rate movements on earnings," below.

We utilize a yen hedging strategy that calibrates the hedge level to preserve the relative contribution of our yen-based business to the Company's overall return on equity on a leverage neutral basis. We implement this hedging strategy utilizing a variety of instruments, including foreign currency derivative contracts, as discussed above, as well as U.S. dollar-denominated assets and, to a lesser extent, "dual currency" and "synthetic dual currency" assets held locally in our Japanese insurance subsidiaries. We may also hedge using instruments held in our U.S. domiciled entities, such as U.S. dollar-denominated debt that has been swapped to yen. The total hedge level may vary based on our periodic assessment of the relative contribution of our yen-based business to the Company's overall return on equity.

The table below presents the aggregate amount of instruments that serve to hedge the impact of foreign currency exchange movements on our U.S. dollar-equivalent shareholder return on equity from our Japanese insurance subsidiaries for the periods indicated.

|  | December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in billions) |  |
| Instruments hedging foreign currency exchange rate exposure on U.S. dollar-equivalent earnings: |  |  |
| Forward currency hedging program(1) | \$ 1.6 | \$ 1.9 |
| Instruments hedging foreign currency exchange rate exposure on U.S. dollar-equivalent equity: |  |  |
| U.S. dollar-denominated assets held in yen-based entities(2): |  |  |
| Available-for-sale U.S. dollar-denominated investments, at amortized cost | 12.6 | 13.0 |
| Other | 0.1 | 0.1 |
| Subtotal | 12.7 | 13.1 |
| Dual currency and synthetic dual currency investments(3) | 0.7 | 0.8 |
| Total instruments hedging foreign currency exchange rate exposure on U.S. dollar-equivalent equity | 13.4 | 13.9 |
| Total hedges | \$15.0 | \$15.8 |

(1) Represents the notional amount of forward currency contracts outstanding.
(2) Excludes $\$ 36.2$ billion and $\$ 30.5$ billion as of December 31, 2016 and 2015, respectively, of U.S. dollar-denominated assets supporting U.S. dollardenominated liabilities related to U.S. dollar-denominated products issued by our Japanese insurance operations.
(3) Dual currency and synthetic dual currency investments are held by our yen-based entities in the form of fixed maturities and loans with a yen-denominated principal component and U.S. dollar-denominated interest income. The amounts shown represent the present value of future U.S. dollar-denominated cash flows.

The U.S. dollar-denominated investments that hedge U.S. dollar-equivalent earnings and shareholder return on equity from our Japanese insurance operations are reported within yen-based entities and, as a result, foreign currency exchange rate movements will impact their value reported within our yen-based Japanese insurance entities. We seek to mitigate the risk that future unfavorable foreign currency exchange rate movements will decrease the value of these U.S. dollar-denominated investments reported within our yen-based Japanese insurance entities, and therefore negatively impact their equity and regulatory solvency margins, by employing internal hedging strategies between a subsidiary of Prudential Financial and these yen-based entities. These internal hedging strategies have the economic effect of moving the change in value of these U.S. dollar-denominated investments due to foreign currency exchange rate movements from our Japanese yen-based entities to our U.S. dollar-based entities.

These U.S. dollar-denominated investments also pay a coupon which is generally higher than what a similar yen-denominated investment would pay. The incremental impact of this higher yield on our U.S. dollar-denominated investments, as well as our dual currency and synthetic dual currency investments, will vary over time, and is dependent on the duration of the underlying investments as well as interest rate environments in both the U.S. and Japan at the time of the investments. See "-General Account InvestmentsInvestment Results" for a discussion of the investment yields generated by our Japanese insurance operations.

## Impact of foreign currency exchange rate movements on earnings

The financial results of our International Insurance, Retirement and Asset Management segments reflect the impact of intercompany arrangements with our Corporate and Other operations pursuant to which certain of these segments' non-U.S. dollar-denominated earnings are translated at fixed currency exchange rates. Results of our Corporate and Other operations include any differences between the translation adjustments recorded by the segments at the fixed currency exchange rate versus the actual average rate during the period. In addition, specific to our International Insurance segment where we hedge certain currencies, as further discussed below, the results of our Corporate and Other operations also include the impact of any gains or losses recorded from forward currency contracts that settled during the period, which include the impact of any over or under hedging of actual earnings that differ from projected earnings.

For International Insurance, the fixed currency exchange rates are determined in connection with a foreign currency income hedging program designed to mitigate the impact of exchange rate changes on the segment's U.S. dollar-equivalent earnings. Pursuant to this program, Corporate and Other operations execute forward currency contracts with third parties to sell the net exposure of projected earnings for certain currencies in exchange for U.S. dollars at specified exchange rates. The maturities of these contracts correspond with the future periods (typically on a three year rolling basis) in which the identified non-U.S. dollar-denominated earnings are expected to be generated. In establishing the level of non-U.S. dollar-denominated earnings that will be hedged through this program, we exclude the anticipated level of U.S. dollar-denominated earnings that will be generated by U.S. dollar-denominated products and investments. For the twelve months ended December 31, 2016, approximately $29 \%$ of the segment's earnings were yen-based and, as of December 31, 2016, we have hedged $100 \%, 73 \%$ and $28 \%$ of expected yen-based earnings for 2017,2018 and 2019 , respectively. To the extent currently unhedged, our International Insurance segment's future expected U.S. dollar-equivalent of yen-based earnings will be impacted by yen exchange rate movements.

As a result of this intercompany arrangement, our International Insurance segment's results for 2016, 2015 and 2014 reflect the impact of translating yen-denominated earnings at fixed currency exchange rates of 106,91 and 82 yen per U.S. dollar, respectively, and Korean won-denominated earnings at fixed currency exchange rates of 1100 , 1120 and 1150 Korean won per U.S. dollar, respectively. We expect our results for 2017 to reflect the impact of translating yen-denominated earnings at a fixed currency exchange rate of 112 yen per U.S. dollar and Korean won-denominated earnings at a fixed currency exchange rate of 1130 Korean won per U.S. dollar. Since determination of the fixed currency exchange rates for each respective year is impacted by changes in foreign currency exchange rates over time, the segment's future earnings will ultimately be impacted by these changes in exchange rates.

The table below presents, for the periods indicated, the increase (decrease) to revenues and adjusted operating income for the International Insurance, Asset Management and Retirement segments and for Corporate and Other operations, reflecting the impact of these intercompany arrangements.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Segment impacts of intercompany arrangements: |  |  |  |
| International Insurance | \$ 23 | \$ 331 | \$ 275 |
| Retirement | 9 | 0 | 0 |
| Asset Management | 6 | 0 | 0 |
| Impact of intercompany arrangements(1) | 38 | 331 | 275 |
| Corporate and Other operations: |  |  |  |
| Impact of intercompany arrangements(1) | (38) | (331) | (275) |
| Settlement gains (losses) on forward currency contracts(2) | 38 | 286 | 293 |
| Net benefit (detriment) to Corporate and Other operations | 0 | (45) | 18 |
| Net impact on consolidated revenues and adjusted operating income | \$ 38 | \$ 286 | \$ 293 |

(1) Represents the difference between non-U.S. dollar-denominated earnings translated on the basis of weighted average monthly currency exchange rates versus fixed currency exchange rates determined in connection with the foreign currency income hedging program.
(2) As of December 31, 2016 and 2015, the notional amounts of these forward currency contracts within our Corporate \& Other operations were $\$ 2.7$ billion and $\$ 2.4$ billion, respectively, of which $\$ 1.6$ billion and $\$ 1.9$ billion, respectively, were related to our Japanese insurance operations.

## Impact of products denominated in non-local currencies on U.S. GAAP earnings

Our international insurance operations primarily offer products denominated in local currency; however, several of our international insurance operations also offer products denominated in non-local currencies, most notably our Japanese operations, which offer U.S. and Australian dollar-denominated products. The non-local currency-denominated insurance liabilities related to these products are supported by investments denominated in corresponding currencies, including a significant portion designated as available-for-sale. While the impact from foreign currency exchange rate movements on these non-local currency-denominated assets and liabilities is economically matched, differences in the accounting for changes in the value of these assets and liabilities due to changes in foreign currency exchange rate movements have historically resulted in volatility in U.S. GAAP earnings. For example, unrealized gains (losses) on available-for-sale investments, including those arising from non-local currency exchange rate movements, are recorded in AOCI, whereas the non-local currency-denominated liabilities are remeasured for foreign currency exchange rate movements, and the related changes in value are recorded in earnings within "Other income." Investments designated as held-to-maturity under U.S. GAAP are recorded at amortized cost on the balance sheet, but are remeasured for foreign currency exchange rate movements, with the related change in value recorded in earnings within "Other income." Due to this non-economic volatility that is reflected in U.S. GAAP earnings, the gains (losses) resulting from the remeasurement of these non-local currency-denominated liabilities, and certain related non-local currency-denominated assets, were excluded from adjusted operating income and included in "Realized investment gains (losses), net, and related adjustments." Included in "Realized investment gains (losses), net, and related adjustments" were net losses of $\$ 170$ million, net gains of $\$ 63$ million and net losses of $\$ 3,073$ million from foreign currency remeasurement for the years ended December 31, 2016, 2015 and 2014, respectively.

As discussed above, in the first quarter of 2015 we implemented a structure in Gibraltar Life that disaggregated the U.S. and Australian dollar-denominated businesses into separate divisions, each with its own functional currency that aligns with the underlying products and investments. For the U.S. and Australian dollar-denominated assets that were transferred under this structure, the net cumulative unrealized investment gains associated with foreign exchange remeasurement that were recorded in AOCI totaled $\$ 6.0$ billion and will be recognized in earnings within "Realized investment gains (losses), net" over time as the assets mature or are sold. As of December 31, 2016, the remaining net cumulative unrealized investment gains balance related to these assets was $\$ 4.4$ billion. Absent the sale of any of these assets prior to their stated maturity, approximately $9 \%$ of the $\$ 4.4$ billion balance will be recognized in 2017, approximately $8 \%$ will be recognized in 2018, and a majority of the remaining balance will be recognized from 2019 through 2024.

## Variable Annuities Recapture and Risk Management Strategy

Effective April 1, 2016, we recaptured the risks related to our variable annuities living benefit riders and certain retirement products that were previously reinsured to our captive reinsurance company, Pruco Reinsurance, Ltd. ("Pruco Re"). These risks were recaptured by the originating insurance entities, thereby combining those risks with their base contracts. In addition, variable annuity contracts issued by Pruco Life Insurance Company ("Pruco Life"), a subsidiary of Prudential Insurance, were reinsured to our subsidiary, Prudential Annuities Life Assurance Corporation ("PALAC") while variable annuity contracts issued by Pruco Life Insurance Company of New Jersey ("PLNJ"), a subsidiary of Pruco Life, were reinsured to Prudential Insurance. These series of transactions are collectively referred to as the "Variable Annuities Recapture."

The Variable Annuities Recapture allows us to manage the capital and liquidity risks of these products more efficiently by aggregating both the risks and the assets supporting these risks in the same entities. The Variable Annuities Recapture resulted in an increase of highly liquid assets at Prudential Financial of approximately $\$ 1.0$ billion, due to payments received from subsidiaries in the form of dividends, returns of capital, and repayments under affiliate loan agreements, net of capital contributions, and is expected to reduce future capital volatility associated with our variable annuities business.

In connection with this transaction, we evaluated the overall risk management strategy associated with our Individual Annuities segment, including potential future enhancements to the living benefits hedging program. During the third quarter of 2016, we implemented modifications to the Individual Annuities' risk management strategy in order to more efficiently manage the capital and liquidity associated with these products while continuing to mitigate fluctuations in net income due to capital market movements. These modifications include utilizing a combination of traditional fixed income instruments and derivatives to manage the associated risks. For more information on the hedging portion of Individual Annuities' risk management strategy and the results of that hedging strategy, see "Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division-Individual Annuities."

## Accounting Policies \& Pronouncements

## Application of Critical Accounting Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the application of accounting policies that often involve a significant degree of judgment. Management, on an ongoing basis, reviews estimates and assumptions used in the preparation of financial statements. If management determines that modifications in assumptions and estimates are appropriate given current facts and circumstances, the Company's results of operations and financial position as reported in the Consolidated Financial Statements could change significantly.

The following sections discuss the accounting policies applied in preparing our financial statements that management believes are most dependent on the application of estimates and assumptions and require management's most difficult, subjective, or complex judgments.

## Deferred Policy Acquisition and Other Costs

We capitalize costs that are directly related to the acquisition or renewal of insurance and annuity contracts. These costs primarily include commissions, as well as costs of policy issuance and underwriting and certain other expenses that are directly related to successfully negotiated contracts. We have also deferred costs associated with sales inducements related to our variable and fixed annuity contracts primarily within our Individual Annuities segment. Sales inducements are amounts that are credited to the policyholder's account balance mainly as an inducement to purchase the contract. For additional information about sales inducements, see Note 11 to the Consolidated Financial Statements. We generally amortize DAC and DSI over the expected lives of the contracts, based on our estimates of the level and timing of gross margins, gross profits, or gross premiums, depending on the type of contract. As described in more detail below, in calculating DAC and DSI amortization, we are required to make assumptions about investment returns, mortality, persistency, and other items that impact our estimates of the level and timing of gross margins, gross profits, or gross premiums. We also periodically evaluate the recoverability of our DAC and DSI. For certain contracts, this evaluation is performed as part of our premium deficiency testing, as discussed further below in "-Policyholder Liabilities." As of December 31, 2016, DAC and DSI for PFI excluding the Closed Block division were $\$ 17.3$ billion and $\$ 1.1$ billion, respectively, and DAC in our Closed Block division was $\$ 336$ million.

## Amortization methodologies

Gross Premiums. DAC associated with the non-participating whole life and term life policies of our Individual Life segment and the whole life, term life, endowment and health policies of our International Insurance segment is primarily amortized in proportion to gross premiums.

Gross Profits. DAC and DSI associated with the variable and universal life policies of our Individual Life and International Insurance segments and the variable and fixed annuity contracts of our Individual Annuities and International Insurance segments are generally amortized over the expected life of these policies in proportion to total gross profits. Total gross profits include both actual gross profits and estimates of gross profits for future periods. In calculating gross profits, we consider mortality, persistency, and other elements as well as rates of return on investments associated with these contracts and the costs related to our guaranteed minimum death and guaranteed minimum income benefits. For variable annuities in our Individual Annuities segment, U.S. GAAP gross profits and amortization rates also include the impacts of the embedded derivatives associated with certain of the optional living benefit features of our variable annuity contracts and related hedging activities. In calculating amortization expense, we estimate the amounts of gross profits that will be included in our U.S. GAAP results and in adjusted operating income, and utilize these estimates to calculate distinct amortization rates and expense amounts. We also regularly evaluate and adjust the related DAC and DSI balances with a corresponding charge or credit to current period earnings for the impact of actual gross profits and changes in our projections of estimated future gross profits on our DAC and DSI amortization rates. Adjustments to the DAC and DSI balances include the impact to our estimate of total gross profits of the annual review of assumptions, our quarterly adjustments for current period experience, and our quarterly adjustments for market performance. Each of these adjustments is further discussed below in "-Annual assumptions review and quarterly adjustments." For additional information on our internally-defined hedge target, see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division-Individual Annuities."

Gross Margins. DAC associated with the traditional participating products of our Closed Block is amortized over the expected lives of those contracts in proportion to estimated gross margins. Gross margins consider premiums, investment returns, benefit claims, costs for policy administration, changes in reserves, and dividends to policyholders. We evaluate our estimates of future gross margins and adjust the related DAC balance with a corresponding charge or credit to current period earnings for the effects of actual gross margins and changes in our expected future gross margins. DAC adjustments for these participating products generally have not created significant volatility in our results of operations since many of the factors that affect gross margins are also included in the determination of our dividends to these policyholders and, during most years, the Closed Block has recognized a cumulative policyholder dividend obligation expense in "Policyholders' dividends," for the excess of actual cumulative earnings over expected cumulative earnings as determined at the time of
demutualization. However, if actual cumulative earnings fall below expected cumulative earnings in future periods, thereby eliminating the cumulative policyholder dividend obligation expense, changes in gross margins and DAC amortization would result in a net impact to the Closed Block results of operations. As of December 31, 2016, the excess of actual cumulative earnings over the expected cumulative earnings was $\$ 1,647$ million.

The amortization methodologies for products not discussed above primarily relate to less significant DAC balances associated with products in our Group Insurance and Retirement segments, which comprised approximately $2 \%$ of the Company's total DAC balance as of December 31, 2016.

## Annual assumptions review and quarterly adjustments

Annually, we perform a comprehensive review of the assumptions used in estimating gross profits for future periods. Over the last several years, the Company's most significant assumption updates resulting in a change to expected future gross profits and the amortization of DAC and DSI have been related to lapse experience and other contractholder behavior assumptions, mortality, and revisions to expected future rates of returns on investments. These assumptions may also cause potential significant variability in amortization expense in the future. The impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time.

The quarterly adjustments for current period experience referred to above reflect the impact of differences between actual gross profits for a given period and the previously estimated expected gross profits for that period. To the extent each period's actual experience differs from the previous estimate for that period, the assumed level of total gross profits may change. In these cases, we recognize a cumulative adjustment to all previous periods' amortization, also referred to as an experience true-up adjustment.

The quarterly adjustments for market performance referred to above reflect the impact of changes to our estimate of total gross profits to reflect actual fund performance and market conditions. A significant portion of gross profits for our variable annuity contracts and, to a lesser degree, our variable life policies are dependent upon the total rate of return on assets held in separate account investment options. This rate of return influences the fees we earn, costs we incur associated with the guaranteed minimum death and guaranteed minimum income benefit features related to our variable annuity contracts, as well as other sources of profit. Returns that are higher than our expectations for a given period produce higher than expected account balances, which increase the future fees we expect to earn and decrease the future costs we expect to incur associated with the guaranteed minimum death and guaranteed minimum income benefit features related to our variable annuity contracts. The opposite occurs when returns are lower than our expectations. The changes in future expected gross profits are used to recognize a cumulative adjustment to all prior periods' amortization.

The near-term future equity rate of return assumption used in evaluating DAC and other costs for our domestic variable annuity and variable life insurance products is derived using a reversion to the mean approach, a common industry practice. Under this approach, we consider historical equity returns and adjust projected equity returns over an initial future period of five years (the "near-term") so that equity returns converge to the long-term expected rate of return. If the near-term projected future rate of return is greater than our near-term maximum future rate of return of $15 \%$, we use our maximum future rate of return. As of December 31, 2016, our variable annuities and variable life insurance businesses assume an $8.0 \%$ long-term equity expected rate of return and a $5.6 \%$ near-term mean reversion equity rate of return.

The weighted average rate of return assumptions consider many factors specific to each business, including asset durations, asset allocations and other factors. We generally update the near-term equity rates of return and our estimate of total gross profits each quarter to reflect the result of the reversion to the mean approach. We generally update the future interest rates used to project fixed income returns annually and in any quarter when interest rates vary significantly from these assumptions. These market performance related adjustments to our estimate of total gross profits result in cumulative adjustments to prior amortization, reflecting the application of the new required rate of amortization to all prior periods' gross profits.

## DAC and DSI Sensitivities

Variability in the level of amortization expense has historically been driven by the variable annuities and variable and universal life insurance policies in our Individual Life and Individual Annuities segments, for which costs are primarily amortized in proportion to total gross profits. For our International Insurance segment, these products have historically experienced less significant variability due to a less material block of variable annuities and variable and universal life insurance policies.

For the variable and universal life policies of our Individual Life segment, a significant portion of our gross profits is derived from mortality margins. As a result, our estimates of future gross profits are significantly influenced by our mortality assumptions. Our mortality assumptions are used to estimate future death claims over the life of these policies and may be developed based on Company experience, industry experience and/or other factors. Unless a material change in mortality experience that we feel is indicative of a long-term trend is observed in an interim period, we generally update our mortality assumptions annually. Updates to our mortality assumptions in future periods could have a significant adverse or favorable effect on the results of our operations in the Individual Life segment.

The DAC balance associated with the variable and universal life policies of our Individual Life segment as of December 31, 2016 was $\$ 3.3$ billion. The following table provides a demonstration of the sensitivity of that DAC balance relative to our future mortality assumptions by quantifying the adjustments that would be required, assuming both an increase and decrease in our future mortality rate by $1 \%$. The information below is for illustrative purposes only and considers only the direct effect of changes in our mortality assumptions on the DAC balance, with no changes in any other assumptions such as persistency, future rate of return, or expenses included in our
evaluation of DAC. Further, this information does not reflect changes in the unearned revenue reserve, which would partially offset the adjustments to the DAC balance reflected below. These reserves are discussed in more detail below in "-Policyholder Liabilities."

|  | December 31, 2016 |
| :---: | :---: |
|  | Increase/(Decrease) in DAC |
|  | (in millions) |
| Decrease in future mortality by $1 \%$ | \$ 50 |
| Increase in future mortality by $1 \%$ | \$(50) |

In addition to the impact of mortality experience relative to our assumptions, other factors may also drive variability in amortization expense, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time. In 2016, valuation system conversion and methodology changes drove the most significant changes to amortization expense.

For the variable annuity contracts of our Individual Annuities segment, DAC and DSI are more sensitive to changes in our future rate of return assumptions due primarily to the significant portion of our gross profits that is dependent upon the total rate of return on assets held in separate account investment options. The DAC and DSI balances associated with our domestic variable annuity contracts were $\$ 4.9$ billion and $\$ 1.1$ billion, respectively, as of December 31, 2016. The following table provides a demonstration of the sensitivity of each of these balances relative to our future rate of return assumptions by quantifying the adjustments to each balance that would be required assuming both an increase and decrease in our future rate of return by 100 bps . The information below is for illustrative purposes only and considers only the direct effect of changes in our future rate of return on the DAC and DSI balances and not changes in any other assumptions such as persistency, mortality, or expenses included in our evaluation of DAC and DSI. Further, this information does not reflect changes in reserves, such as the reserves for the guaranteed minimum death and optional living benefit features of our variable annuity products, or the impact that changes in such reserves may have on the DAC and DSI balances.

|  | Decembe | 31,2016 |
| :---: | :---: | :---: |
|  | Increase/ (Decrease) in DAC | Increase/ (Decrease) in DSI |
|  | (in m | lons) |
| Decrease in future rate of return by 100 bps | \$(378) | \$(126) |
| Increase in future rate of return by 100 bps | \$ 350 | \$ 127 |

In addition to the impact of market performance relative to our future rate of return assumptions, other factors may also drive variability in amortization expense, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time. In 2016, updates to lapse assumptions partially offset by updates to mapping of funds to related indices and projected interest rate assumptions, drove the most significant changes to amortization expense.

## Value of Business Acquired

In addition to DAC and DSI, we also recognize an asset for VOBA. VOBA is an intangible asset which represents an adjustment to the stated value of acquired inforce insurance contract liabilities to present them at fair value, determined as of the acquisition date. VOBA is amortized over the expected life of the acquired contracts in proportion to either gross premiums or estimated gross profits, depending on the type of contract. VOBA is also subject to recoverability testing. As of December 31, 2016, VOBA was $\$ 2.3$ billion, and included $\$ 1.3$ billion related to the acquisition from American International Group ("AIG") of AIG Star Life Insurance Co., Ltd, AIG Edison Life Insurance Company, AIG Financial Assurance Japan K.K. and AIG Edison Service Co., Ltd. (collectively, the "Star and Edison Businesses") on February 1, 2011, and $\$ 0.8$ billion related to the acquisition of The Hartford Financial Services Group's individual life insurance business ("the Hartford Life Business") on January 2, 2013. The remaining $\$ 0.2$ billion primarily relates to previously-acquired traditional life, deferred annuity, defined contribution and defined benefit businesses.

The VOBA associated with the Hartford Life Business is primarily amortized over the expected life of the acquired contracts in proportion to estimates of gross profits. A significant portion of our gross profits is derived from mortality margins. As a result, our estimates of future gross profits are significantly influenced by our mortality assumptions. Our mortality assumptions are used to estimate future death claims over the life of these policies and may be developed based on Company experience, industry experience and/or other factors. Unless a material change in mortality experience that we feel is indicative of a long-term trend is observed in an interim period, we generally update our mortality assumptions annually. Updates to our mortality assumptions in future periods could have a significant adverse or favorable effect on the results of our operations in the Individual Life segment. The following table provides a demonstration of the sensitivity of that VOBA balance relative to our future mortality assumptions by quantifying the adjustments that would be required, assuming both an increase and decrease in our future mortality rate by $1 \%$. The information below is for illustrative purposes only and considers only the direct effect of changes in our mortality assumptions on the VOBA balance, with no changes in any other assumptions such as persistency, future rate of return, or expenses included in our evaluation of VOBA, and does not reflect changes in reserves.

|  | December 31, 2016 |
| :---: | :---: |
|  | Increase/(Decrease) in VOBA |
|  | (in millions) |
| Decrease in future mortality by $1 \%$ | \$ 8 |
| Increase in future mortality by $1 \%$ | \$(17) |

In addition to the impact of mortality experience relative to our assumptions, other factors may also drive variability in amortization expense, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time. In 2016, partial write-down of VOBA due to a loss recognition event drove the most significant changes to amortization expense.

The VOBA associated with the inforce contracts acquired from AIG of the Star and Edison Businesses is less sensitive to assumption changes, as the majority is amortized in proportion to premiums which are more predictably stable compared to gross profits. For additional information about VOBA including details on items included in our estimates of future cash flows for the various acquired businesses and its bases for amortization, see Note 2 and Note 8 to the Consolidated Financial Statements.

## Goodwill

As of December 31, 2016, our goodwill balance of $\$ 833$ million is reflected in the following four reporting units: $\$ 444$ million related to our Retirement Full Service business, $\$ 230$ million related to our Asset Management business, $\$ 147$ million related to our Gibraltar Life and Other operations and $\$ 12$ million related to our International Insurance Life Planner business.

We test goodwill for impairment on an annual basis, as of December 31 of each year, or more frequently if events or circumstances indicate the potential for impairment is more likely than not. The goodwill impairment analysis is performed at the reporting unit level which is equal to or one level below our operating segments. Accounting guidance provides for an optional qualitative assessment for testing goodwill impairment that may allow companies to skip the quantitative two step test. For additional information on goodwill and the process for testing goodwill for impairment, see Note 2 and Note 9 to the Consolidated Financial Statements.

In the International Insurance Life Planner business and the Asset Management segment, we did not elect to utilize the option for qualitative analysis and therefore completed a quantitative impairment analysis using an earnings multiple approach. The earnings multiple approach indicates the value of a business based on comparison to publicly-traded comparable companies in similar lines of business. Each comparable company is analyzed based on various factors, including, but not limited to, financial risk, size, geographic diversification, profitability, adequate financial data, and an actively traded stock price. A multiple of price to earnings is developed for the comparable companies using independent analysts' consensus estimates for each company's 2017 forecasted earnings. The multiples are then aggregated and a mean and median multiple is calculated for the group. The lower of the mean or median multiple is then applied to the 2017 forecasted earnings of the reporting unit to develop a value. A control premium is then added to determine a total estimated fair value for the reporting unit.

In the Retirement Full Service business and Gibraltar Life and Other operations, we also did not elect to utilize the option for qualitative analysis and therefore completed a quantitative impairment analysis using a discounted cash flow approach. The discounted cash flow approach calculates the value of a business by applying a discount rate reflecting the market expected rate of return of the reporting unit to its projected future cash flows. These projected future cash flows were based on our internal forecasts, an expected growth rate and a terminal value. The reporting unit expected rate of return represents the required rate of return on its total capitalization. The process of deriving reporting unit specific required rates of return begins with the calculation of an overall Company Weighted Average Cost of Capital, which includes the calculation of the required return on equity using a Capital Asset Pricing Model ("CAPM"). The CAPM is a generally accepted method for estimating an equity investor's return requirement, and hence a company's cost of equity capital. The calculation using the CAPM begins with the long-term risk-free rate of return, then applies a market risk premium for large company common stock, as well as company specific adjustments to address volatility versus the market. The Company then determines reporting unit specific required rates of return based on their relative volatilities, benchmarks results against reporting unit comparable companies, and ensures that the sum of the reporting unit required returns (after considering the impact of unallocated Corporate costs and capital) add up to the overall Company required return. This process results in reporting unit specific discount rates which are then applied to the expected future cash flows of the Retirement Full Service business and Gibraltar Life and Other operations to estimate their respective fair values.

After completion of the first step of the quantitative tests, the fair values exceeded the carrying amounts for each of the four reporting units and we concluded there was no impairment as of December 31, 2016. The Asset Management, International Insurance Life Planner, Gibraltar Life and Other operations, and Retirement Full Service businesses had estimated fair values that exceeded their carrying amounts, each by at least $45 \%$. Completion of the second step of the quantitative analysis is therefore not necessary.

Estimating the fair value of reporting units is a subjective process that involves the use of significant estimates by management. Regarding all reporting units tested, market declines or other events impacting the fair value of these businesses, including discount rates, interest rates and growth rate assumptions or increases in the level of equity required to support these businesses, could result in goodwill impairments, resulting in a charge to income.

## Valuation of Investments, Including Derivatives, and the Recognition of Other-than-Temporary Impairments

Our investment portfolio consists of public and private fixed maturity securities, commercial mortgage and other loans, equity securities, other invested assets, and derivative financial instruments. Derivatives are financial instruments whose values are derived from interest rates, foreign exchange rates, financial indices or the values of securities or commodities. Derivative financial instruments we generally use include swaps, futures, forwards and options and may be exchange-traded or contracted in the OTC market. We are also party to financial instruments that contain derivative instruments that are "embedded" in the financial instruments. Management believes the following accounting policies related to investments, including derivatives, are most dependent on the application of estimates and assumptions. Each of these policies is discussed further within other relevant disclosures related to the investments and derivatives, as referenced below:

- Valuation of investments, including derivatives;
- Recognition of other-than-temporary impairments ("OTTI"); and
- Determination of the valuation allowance for losses on commercial mortgage and other loans.

We present at fair value in the statements of financial position our investments classified as available-for-sale (including fixed maturity and equity securities), investments classified as trading such as our trading account assets supporting insurance liabilities, derivatives and embedded derivatives. For additional information regarding the key estimates and assumptions surrounding the determination of fair value of fixed maturity and equity securities, as well as derivative instruments, embedded derivatives and other investments, see Note 20 to the Consolidated Financial Statements and "-Valuation of Assets and Liabilities-Fair Value of Assets and Liabilities."

For our investments classified as available-for-sale, the impact of changes in fair value is recorded as an unrealized gain or loss in AOCI, a separate component of equity. For our investments classified as trading, the impact of changes in fair value is recorded within "Other income." In addition, investments classified as available-for-sale, as well as those classified as held-to-maturity, are subject to impairment reviews to identify when a decline in value is other-than-temporary. For a discussion of our policies regarding other-thantemporary declines in investment value and the related methodology for recording OTTI of fixed maturity and equity securities, see Note 2 to the Consolidated Financial Statements.

Commercial mortgage and other loans are carried primarily at unpaid principal balances, net of unamortized deferred loan origination fees and expenses and unamortized premiums or discounts and a valuation allowance for losses. For a discussion of our policies regarding the valuation allowance for commercial mortgage and other loans, see Note 2 to the Consolidated Financial Statements.

## Policyholder Liabilities

## Future Policy Benefit Reserves, including Unpaid Claims and Claim Adjustment Expenses

We establish reserves for future policy benefits to, or on behalf of, policyholders in the same period in which the policy is issued or acquired, using methodologies prescribed by U.S. GAAP. The reserving methodologies used include the following:

- For most long-duration contracts, we utilize best estimate assumptions as of the date the policy is issued or acquired with provisions for the risk of adverse deviation, as appropriate. After the liabilities are initially established, we perform premium deficiency tests using best estimate assumptions as of the testing date without provisions for adverse deviation. If the liabilities determined based on these best estimate assumptions are greater than the net reserves (i.e., GAAP reserves net of any DAC, DSI or VOBA asset), the existing net reserves are adjusted by first reducing these assets by the amount of the deficiency or to zero through a charge to current period earnings. If the deficiency is more than these asset balances for insurance contracts, we then increase the net reserves by the excess, again through a charge to current period earnings. If a premium deficiency is recognized, the assumptions as of the premium deficiency test date are locked in and used in subsequent valuations and the net reserves continue to be subject to premium deficiency testing.
- For certain reserves, such as those related to guaranteed minimum death benefits ("GMDB"), guaranteed minimum income benefits ("GMIB") and no-lapse guarantees, we utilize current best estimate assumptions in establishing reserves. The reserves are subject to adjustments based on annual reviews of assumptions and quarterly adjustments for experience, including market performance, and the reserves may be adjusted through a benefit or charge to current period earnings.
- For certain product guarantees, primarily certain optional living benefit features of the variable annuity products in our Individual Annuities segment, the benefits are accounted for as embedded derivatives, with fair values calculated as the present value of expected future benefit payments to contractholders less the present value of assessed rider fees attributable to the embedded derivative feature. Under U.S. GAAP, the fair values of these benefit features are based on assumptions a market participant would use in valuing these embedded derivatives. Changes in the fair value of the embedded derivatives are recorded quarterly through a benefit or charge to current period earnings.

The assumptions used in establishing reserves are generally based on the Company's experience, industry experience and/or other factors, as applicable. We typically update our actuarial assumptions, such as mortality, morbidity, retirement and policyholder behavior assumptions, annually, unless a material change is observed in an interim period that we feel is indicative of a long-term trend. Generally, we do not expect trends to change significantly in the short-term and, to the extent these trends may change, we expect such changes to be gradual over the long-term. In a sustained low interest rate environment, there is an increased likelihood that the reserves determined based on best estimate assumptions may be greater than the net liabilities.

The following paragraphs provide additional details about the reserves established by each of our segments:
The future policy benefit reserves for our International Insurance segment, which as of December 31, 2016, represented 43\% of our total future policy benefit reserves, primarily relate to non-participating whole life and term life products and endowment contracts, and are generally determined as the present value of expected future benefits to, or on behalf of, policyholders plus the present value of future maintenance expenses less the present value of future net premiums. For these reserves, we utilize best estimate assumptions as of the date the policy is issued or acquired with provisions for the risk of adverse deviation, as described above. The primary assumptions used in determining expected future benefits and expenses include mortality, lapse, morbidity, investment yield and maintenance expense assumptions. In addition, future policy benefit reserves for certain contracts also include amounts related to our deferred profit liability.

The reserves for future policy benefits of our Retirement segment, which as of December 31, 2016, represented $23 \%$ of our total future policy benefit reserves, primarily relate to our non-participating life contingent group annuity and structured settlement products. These reserves are generally determined as the present value of expected future benefits and expenses. For these reserves, we utilize best estimate assumptions as of the date the policy is issued or acquired with provisions for the risk of adverse deviation, as described above. For
contracts that have recorded a premium deficiency reserve, we use assumptions as of the most recent premium deficiency reserve establishment. The primary assumptions used in establishing these reserves include mortality, retirement, maintenance expense, and investment yield assumptions. In addition, future policy benefit reserves for certain contracts also include amounts related to our deferred profit liability.

The reserves for future policy benefits of our Individual Annuities segment, which as of December 31, 2016, represented 4\% of our total future policy benefit reserves, primarily relate to reserves for the GMDB and GMIB features of our variable annuities, and for the optional living benefit features that are accounted for as embedded derivatives. As discussed above, in establishing reserves for GMDBs and GMIBs, we utilize current best estimate assumptions. The primary assumptions used in establishing these reserves include annuitization, lapse, withdrawal and mortality assumptions, as well as interest rate and equity market return assumptions. Lapse rates are adjusted at the contract level based on the in-the-moneyness of the living benefit and reflect other factors, such as the applicability of any surrender charges. Lapse rates are reduced when contracts are more in-the-money. Lapse rates are also generally assumed to be lower for the period where surrender charges apply.

The reserves for certain optional living benefit features, including guaranteed minimum accumulation benefits ("GMAB"), guaranteed minimum withdrawal benefits ("GMWB") and guaranteed minimum income and withdrawal benefits ("GMIWB"), are accounted for as embedded derivatives, with fair values calculated as the present value of expected future benefit payments to contractholders less the present value of assessed rider fees attributable to the embedded derivative feature. This methodology could result in either a liability or contra-liability balance, given changing capital market conditions and various actuarial assumptions. Since there is no observable active market for the transfer of these obligations, the valuations are calculated using internally-developed models with option pricing techniques. The models are based on a risk neutral valuation framework and incorporate premiums for risks inherent in valuation techniques, inputs, and the general uncertainty around the timing and amount of future cash flows. The significant inputs to the valuation models for these embedded derivatives include capital market assumptions, such as interest rate levels and volatility assumptions, the Company's marketperceived risk of its own non-performance ("NPR"), as well as actuarially determined assumptions, including contractholder behavior, such as lapse rates, benefit utilization rates, withdrawal rates, and mortality rates. Capital market inputs and actual contractholders' account values are updated each quarter based on capital market conditions as of the end of the quarter, including interest rates, equity markets and volatility. In the risk neutral valuation, the initial swap curve drives the total returns used to grow the contractholders' account values. The Company's discount rate assumption is based on the LIBOR swap curve adjusted for an additional spread relative to LIBOR to reflect NPR. Actuarial assumptions, including contractholder behavior and mortality, are reviewed at least annually, and updated based upon emerging experience, future expectations and other data, including any observable market data, such as available industry studies or market transactions such as acquisitions and reinsurance transactions. For additional information regarding the valuation of these optional living benefit features, see Note 20 to the Consolidated Financial Statements.

The future policy benefit reserves for our Individual Life segment, which as of December 31, 2016, represented 5\% of our total future policy benefit reserves, primarily relate to term life, universal life and variable life products. For term life contracts, the future policy benefit reserves are determined as the present value of expected future benefits to, or on behalf of, policyholders plus the present value of future maintenance expenses less the present value of future net premiums. For these reserves, we utilize best estimate assumptions as of the date the policy is issued or acquired with provisions for the risk of adverse deviation, as described above. The primary assumptions used in determining expected future benefits and expenses include mortality, lapse, and maintenance expense assumptions. For variable and universal life products, which include universal life contracts that contain no-lapse guarantees, reserves are established using current best estimate assumptions, as described above.

The reserves for future policy benefits of our Group Insurance segment, which as of December 31, 2016, represented $2 \%$ of our total future policy benefit reserves, primarily relate to reserves for group life and disability benefits. For short-duration contracts, a liability is established when the claim occurs. The reserves for group life and disability benefits include our liability of $\$ 2.7$ billion for unpaid claims and claim adjustment expenses for our Group Insurance segment as of December 31, 2016, which relates primarily to the group long-term disability product. This liability represents our estimate of future disability claim payments and expenses as well as estimates of claims that have been incurred, but have not yet been reported, as of the balance sheet date. The liability is determined as the present value of expected future claim payments and expenses. The primary assumptions used in determining expected future claim payments are claim termination factors, an assumed interest rate and expected Social Security offsets. Long-term disability claims and claim termination experience may be affected by the economic environment and internal factors such as our claims management process. The remaining reserves for future policy benefits for group life and disability benefits relate primarily to our group life business, and include reserves for Waiver of Premium, Claims In Course of Settlement and Claims Incurred But Not Reported. The Waiver of Premium reserve is calculated as the present value of future benefits, and utilizes assumptions such as expected mortality and recovery rates. The Claims In Course of Settlement reserve is based on the inventory of claims that have been reported but not yet paid. The Claims Incurred But Not Reported reserve is estimated using expected patterns of claims reporting.

The reserves for future policy benefits of our Corporate \& Other operations, which as of December 31, 2016, represented $2 \%$ of our total future policy benefit reserves, primarily relate to our long-term care products. These reserves are generally determined as the present value of expected future benefits and expenses less future premiums. Most contracts have recorded a premium deficiency reserve, for which we use assumptions as of the most recent premium deficiency reserve establishment. The primary assumptions used in establishing these reserves include interest rate, morbidity, mortality, lapse, premium rate increase and maintenance expense assumptions. In addition, certain less significant reserves for our long-term care products, such as our disabled life reserves, are established using current best estimate actuarial assumptions, as described above.

The future policy benefit reserves for the traditional participating life insurance products of the Closed Block division, which as of December 31, 2016, represented $21 \%$ of our total future policy benefit reserves are determined using the net level premium method. Under this method, the future policy benefit reserves are accrued as a level proportion of the premium paid by the policyholder. In applying this method, we use mortality assumptions to determine our expected future benefits and expected future premiums, and apply an interest rate
to determine the present value of both the expected future benefit payments and the expected future premiums. The mortality assumptions are based on standard industry mortality tables that were used to determine the cash surrender value of the policies, and the interest rates used are the interest rates used to calculate the cash surrender value of the policies.

## Profits Followed by Losses

In certain instances, the policyholder liability for a particular line of business may not be deficient in the aggregate to trigger loss recognition, but the pattern of earnings may be such that profits are expected to be recognized in earlier years followed by losses in later years. In these situations, accounting standards require that an additional liability (Profits Followed by Losses or "PFL" liability) be recognized by an amount necessary to sufficiently offset the losses that would be recognized in later years. As a result, in connection with the second quarter assumption updates we recorded a charge to earnings of $\$ 444$ million to recognize a PFL liability based on our current estimate of the present value of the amount necessary to offset losses anticipated in future periods. Because the liability is measured on a discounted basis, there will also be accretion into future earnings through an interest charge, and the liability will ultimately be released into earnings as an offset to future losses. This PFL liability is predominantly associated with certain universal life contracts that measure GAAP reserves using a dynamic approach and accordingly, will be updated each quarter using current inforce and market data and as part of the annual assumption update.

## Sensitivity for Future Policy Benefit Reserves

We expect the future benefit reserves in our Individual Annuities segment that are based on current best estimate assumptions, and those that represent embedded derivatives recorded at fair value, to be the ones most likely to drive variability in earnings from period to period.

For the GMDB and GMIB features of our variable annuities in our Individual Annuities segment, the reserves for these contracts are significantly influenced by the future rate of return assumptions. The following table provides a demonstration of the sensitivity of the reserves for GMDBs and GMIBs related to variable annuity contracts relative to our future rate of return assumptions by quantifying the adjustments to these reserves that would be required assuming both a 100 basis point increase and decrease in our future rate of return. The information below is for illustrative purposes only and considers only the direct effect of changes in our future rate of return on operating results due to the change in the reserve balance and not changes in any other assumptions such as persistency or mortality included in our evaluation of the reserves, or any changes on DAC or other balances, discussed above in "-Deferred Policy Acquisition and Other Costs."

|  | December 31, 2016 |
| :---: | :---: |
|  | Increase/(Decrease) in GMDB/GMIB Reserves |
|  | (in millions) |
| Decrease in future rate of return by 100 bps | \$ 186 |
| Increase in future rate of return by 100 bps | \$(143) |

In addition to the impact of market performance relative to our future rate of return assumptions, other factors may also drive variability in the change in reserves, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time. In 2016, updates to lapse, mortality and utilization rate assumptions, partially offset by updates to projected interest rate assumptions, drove the most significant changes to these reserves.

For certain optional living benefit features of the variable annuities in our Individual Annuities segment that are accounted for as embedded derivatives, the changes in reserves are significantly impacted by changes in both the capital markets assumptions and actuarial assumptions. Capital market inputs and actual policyholders' account values are updated each quarter based on capital market conditions as of the end of the quarter, while actuarial assumptions are reviewed at least annually, and updated based upon emerging experience, future expectations and other data. For additional information about the impacts of capital markets assumptions, including interest rates, NPR credit spreads and equity returns, refer to "Quantitative and Qualitative Disclosures About Market Risk" below. In 2016, updates to excess withdrawal assumptions and mapping of funds to related indices, partially offset by updates to utilization efficiency assumptions drove the most significant changes to these reserves. Other factors may also drive variability in the change in reserves, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time.

## Unearned Revenue Reserve

Our unearned revenue reserve ("URR"), reported as a component of "Policyholders' account balances," was $\$ 2.5$ billion as of December 31, 2016. This reserve primarily relates to variable and universal life products within our Individual Life segment and represents policy charges for services to be provided in future periods. The charges are deferred as unearned revenue and are generally amortized over the expected life of the contract in proportion to the product's estimated gross profits, similar to DAC as discussed above.

For the variable and universal life policies of our Individual Life segment, a significant portion of our gross profits is derived from mortality margins. As a result, our estimates of future gross profits are significantly influenced by our mortality assumptions. Our mortality assumptions are used to estimate future death claims over the life of these policies and are developed based on Company experience, industry experience and/or other factors. Unless a material change in mortality experience that we feel is indicative of a long-term trend is observed in an interim period, we generally update our mortality assumptions annually. Updates to our mortality assumptions in future periods could have a significant adverse or favorable effect on the results of our operations in the Individual Life segment.

The URR balance associated with the variable and universal life policies of our Individual Life segment as of December 31, 2016 was $\$ 2.1$ billion. The following table provides a demonstration of the sensitivity of that URR balance relative to our future mortality assumptions by quantifying the adjustments that would be required, assuming both an increase and decrease in our future mortality rate by $1 \%$. The information below is for illustrative purposes only and considers only the direct effect of changes in our mortality assumptions on the URR balance and not changes in any other assumptions such as persistency, future rate of return, or expenses included in our evaluation of URR. It does not reflect changes in assets, such as DAC, which would partially offset the adjustments to the URR balance reflected below. The impact of DAC is discussed in more detail above in "-Deferred Policy Acquisition and Other Costs."

|  | December 31, 2016 |
| :---: | :---: |
|  | Increase/(Decrease) in URR |
|  | (in millions) |
| Decrease in future mortality by $1 \%$ | \$ 47 |
| Increase in future mortality by $1 \%$ | \$(47) |

In addition to the impact of mortality experience relative to our assumptions, other factors may also drive variability in the change in reserves, particularly when our annual assumption updates are performed. As noted above, however, the impact on our results of operations of changes in these assumptions can be offsetting and we are unable to predict their movement or offsetting impact over time. In 2016, valuation system conversion and methodology changes drove the most significant changes to our URR reserve.

## Pension and Other Postretirement Benefits

We sponsor pension and other postretirement benefit plans covering employees who meet specific eligibility requirements. Our net periodic costs for these plans consider an assumed discount (interest) rate, an expected rate of return on plan assets, expected increases in compensation levels, mortality and trends in health care costs. Of these assumptions, our expected rate of return assumptions and our discount rate assumptions have historically had the most significant effect on our net period costs associated with these plans.

We determine our expected rate of return on plan assets based upon a building block approach that considers inflation, real return, term premium, credit spreads, equity risk premium and capital appreciation as well as expenses, expected asset manager performance and the effect of rebalancing for the equity, debt and real estate asset mix applied on a weighted average basis to our pension asset portfolio. See Note 18 to our Consolidated Financial Statements for our actual asset allocations by asset category and the asset allocation ranges prescribed by our investment policy guidelines for both our pension and other postretirement benefit plans. Our assumed long-term rate of return for 2016 was $6.25 \%$ for our domestic pension plans and $7.00 \%$ for our other postretirement benefit plans. Given the amount of plan assets as of December 31, 2015, the beginning of the measurement year, if we had assumed an expected rate of return for both our domestic pension and other domestic postretirement benefit plans that was 100 bps higher or 100 bps lower than the rates we assumed, the change in our net periodic costs would have been as shown in the table below. The information provided in the table below considers only changes in our assumed long-term rate of return given the level and mix of invested assets at the beginning of the measurement year, without consideration of possible changes in any of the other assumptions described above that could ultimately accompany any changes in our assumed long-term rate of return.


Foreign pension plans represent $5 \%$ of plan assets at the beginning of 2016. An increase in expected rate of return by 100 bps would result in a decrease in net periodic pension costs of $\$ 6$ million; conversely, a decrease in expected rate of return by 100 bps would result in an increase in net periodic pension costs of $\$ 5$ million.

We determine our discount rate, used to value the pension and postretirement benefit obligations, based upon rates commensurate with current yields on high quality corporate bonds. See Note 18 to the Consolidated Financial Statements for information regarding the December 31, 2015 methodology we employed to determine our discount rate for 2016. Our assumed discount rate for 2016 was $4.50 \%$ for our domestic pension plans and $4.35 \%$ for our other domestic postretirement benefit plans. Given the amount of pension and postretirement obligations as of December 31, 2015, the beginning of the measurement year, if we had assumed a discount rate for both our domestic pension and other postretirement benefit plans that was 100 bps higher or 100 bps lower than the rates we assumed, the change in our net periodic costs would have been as shown in the table below. The information provided in the table below considers only changes in our assumed discount rate without consideration of possible changes in any of the other assumptions described above that could ultimately accompany any changes in our assumed discount rate.

|  | For the year ended December 31, 2016 |  |
| :---: | :---: | :---: |
|  | Increase/(Decreas Periodic Pensio | Increase/(Decrease) in Net Periodic Other Postretirement Cost |
|  | (in millions) |  |
| Increase in discount rate by 100 bps | \$(114) | \$(6) |
| Decrease in discount rate by 100 bps | \$ 135 | \$ 5 |

Foreign pension plans represent $13 \%$ of plan obligations at the beginning of 2016. An increase in discount rate by 100 bps would result in a decrease in net periodic pension costs of $\$ 4$ million; conversely, a decrease in discount rate by 100 bps would result in an increase in net periodic pension costs of $\$ 8$ million.

Given the application of the authoritative guidance for accounting for pensions, and the deferral and amortization of actuarial gains and losses arising from changes in our assumed discount rate, the change in net periodic pension cost arising from an increase in the assumed discount rate by 100 bps would not always be expected to equal the change in net periodic pension cost arising from a decrease in the assumed discount rate by 100 bps .

For a discussion of our expected rate of return on plan assets and discount rate for our qualified pension plan in 2016, see "—Results of Operations by Segment-Corporate and Other."

For purposes of calculating pension income from our own qualified pension plan for the year ended December 31, 2017, we will decrease the discount rate to $4.15 \%$ from $4.50 \%$ in 2016. The expected rate of return on plan assets will remain unchanged at $6.25 \%$, and the assumed rate of increase in compensation will remain unchanged at $4.5 \%$.

In addition to the effect of changes in our assumptions, the net periodic cost or benefit from our pension and other postretirement benefit plans may change due to factors such as actual experience being different from our assumptions, special benefits to terminated employees, or changes in benefits provided under the plans.

At December 31, 2016, the sensitivity of our domestic and foreign pension and postretirement obligations to a 100 basis point change in discount rate was as follows:


## Taxes on Income

Our effective tax rate is based on income, non-taxable and non-deductible items, statutory tax rates and tax planning opportunities available in the various jurisdictions in which we operate. Inherent in determining our annual tax rate are judgments regarding business plans, planning opportunities and expectations about future outcomes. The dividend received deduction ("DRD") is a major reason for the difference between the Company's effective tax rate and the federal statutory rate of $35 \%$. The DRD estimate incorporates the prior year results as well as the current year's equity market performance. Both the current estimate of the DRD and the DRD in future periods can vary based on factors such as, but not limited to, changes in the amount of dividends received that are eligible for the DRD, changes in the amount of distributions received from underlying fund investments, changes in the account balances of variable life and annuity contracts, and the Company's taxable income before the DRD.

The Company provides for U.S. income taxes on unremitted foreign earnings from certain operations in Japan, Korea, Brazil, Germany and Taiwan. Unremitted foreign earnings from operations in other foreign jurisdictions are considered to be permanently reinvested. See Note 19 to the Consolidated Financial Statements for a discussion of unremitted earnings for which the Company provides U.S. Income Taxes.

An increase or decrease in our effective tax rate by one percent of income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures, would have resulted in an increase or decrease in our consolidated income from continuing operations before equity in earnings of operating joint ventures in 2016 of $\$ 57$ million.

The Company's liability for income taxes includes the liability for unrecognized tax benefits and interest that relate to tax years still subject to review by the Internal Revenue Service ("IRS") or other taxing authorities. See Note 19 to the Consolidated Financial Statements for a discussion of the impact in 2016, 2015 and 2014 of changes to our total unrecognized tax benefits. We do not anticipate any significant changes within the next twelve months to our total unrecognized tax benefits related to tax years for which the statute of limitations has not expired.

The Company's affiliates in Japan and Korea file separate tax returns and are subject to audits by the local taxing authority. The general statute of limitations for Japan and Korea are five years from when the return is filed.

## Contingencies

A contingency is an existing condition that involves a degree of uncertainty that will ultimately be resolved upon the occurrence of future events. Under U.S. GAAP, accruals for contingencies are required to be established when the future event is probable and its impact can be reasonably estimated, such as in connection with an unresolved legal matter. The initial reserve reflects management's best estimate of the probable cost of ultimate resolution of the matter and is revised accordingly as facts and circumstances change and, ultimately, when the matter is brought to closure.

## Adoption of New Accounting Pronouncements

There are no new critical accounting estimates resulting from new accounting pronouncements adopted during 2016. See Note 2 to the Consolidated Financial Statements for a complete discussion of newly issued accounting pronouncements.

## Results of Operations by Segment

## U.S. Retirement Solutions and Investment Management Division

## Individual Annuities

The Individual Annuities segment includes both variable and fixed annuities that may include optional guaranteed living benefits riders (e.g., guaranteed minimum income benefits ("GMIB"), guaranteed minimum accumulation benefits ("GMAB"), guaranteed minimum withdrawal benefits ("GMWB"), and guaranteed minimum income and withdrawal benefits ("GMIWB")), and/or guaranteed minimum death benefits ("GMDB"). We also offer fixed annuities that provide a guarantee of principal and interest credited at rates we determine, subject to certain contractual minimums. We derive our revenue mainly from fee income generated on variable annuity account values, as the investment return on these contractholder funds is generally attributed directly to the contractholder. We also earn investment income on general account assets supporting annuity account values and certain other management fees. Our expenses primarily consist of interest credited and other benefits to contractholders, amortization of DAC and other costs, non-deferred expenses related to the selling and servicing of the various products we offer, costs of managing certain risks associated with these products, changes in the reserves for benefit guarantees and other general business expenses. These drivers of our business results are generally included in adjusted operating income, with exceptions related to certain guarantees, as discussed below.

The U.S. GAAP accounting and our adjusted operating income treatment for our guarantees differ depending upon the specific contractual features. Under U.S. GAAP, the reserves for GMDB and GMIB are calculated based on best estimates applying our actuarial and capital markets return assumptions in accordance with an insurance fulfillment accounting framework whereby a liability is established over time representing the portion of fees collected that is expected to be used to satisfy the obligation to pay benefits in future periods. The risks associated with these benefit features are retained and results are included in adjusted operating income in a manner generally consistent with U.S. GAAP.

In contrast, certain of our guaranteed living benefit riders (e.g., GMAB, GMWB and GMIWB) are accounted for under U.S. GAAP as embedded derivatives and reported using a fair value accounting framework. These benefit features are carried at fair value based on estimates of assumptions a market participant would use in valuing these embedded derivatives and the change in fair value during each reporting period is recorded within "Realized investment gains (losses), net." For purposes of measuring segment performance, adjusted operating income excludes the changes in fair value and instead reflects the performance of these riders using an insurance fulfillment accounting framework. Under this framework, adjusted operating income recognized each period reflects the rider fees earned during the period less the portion of such fees estimated to be required to cover future benefit payments and hedging costs. For more information on how we determine the portion of fees needed to cover estimated future benefit payments and hedging costs, see "Variable Annuity Risks and Risk Mitigants" below.

## Account Values

Account values are a significant driver of our operating results. Since most fees are determined by the level of separate account assets, fee income varies according to the level of account values. Additionally, our fee income generally drives other items such as the pattern of amortization of DAC and other costs. Account values are driven by net flows from new business sales, surrenders, withdrawals and benefit payments, the impact of market value changes, which can be either positive or negative, and policy charges. The annuity industry's competitive and regulatory landscapes, which have been dynamic over the last few years, may impact our net flows, including new business sales. The following table sets forth account value information for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Total Individual Annuities(1): |  |  |  |
| Beginning total account value | \$152,945 | \$158,664 | \$154,140 |
| Sales | 8,054 | 8,780 | 10,008 |
| Surrenders and withdrawals | $(7,881)$ | $(8,415)$ | $(8,852)$ |
| Net sales | 173 | 365 | 1,156 |
| Benefit payments | $(1,794)$ | $(1,910)$ | $(1,799)$ |
| Net flows | $(1,621)$ | $(1,545)$ | (643) |
| Change in market value, interest credited and other activity | 9,012 | (585) | 8,666 |
| Policy charges | $(3,553)$ | $(3,589)$ | $(3,499)$ |
| Ending total account value | \$156,783 | \$152,945 | \$158,664 |

[^1]2016 to 2015 Annual Comparison. The increase in account values during 2016 was largely driven by favorable changes in the market value of contractholder funds, partially offset by contract charges on contractholder accounts and benefit payments. Net sales for 2016 decreased compared to 2015 reflecting lower gross sales partially offset by lower surrenders and withdrawals. The decline in gross sales for 2016 compared to 2015 was largely driven by decreased sales of our Prudential Premier ${ }^{\circledR}$ Retirement Variable Annuity with "highest daily" benefit riders and Prudential Premier ${ }^{\circledR}$ Investment Variable Annuity ("PPI"). The declines in gross sales were partially offset by increases in sales of our Prudential Defined Income Variable Annuity ("PDI") product.

2015 to 2014 Annual Comparison. The decrease in account values during 2015 was largely driven by contract charges on contractholder accounts, benefit payments and unfavorable changes in the market value of contractholder funds. The decline in net sales for 2015 compared to 2014 was largely driven by a decrease in sales of our products with the highest daily benefit, partially offset by an increase in sales of our PPI and PDI products.

## Operating Results

The following table sets forth the Individual Annuities segment's operating results for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Operating results: |  |  |  |
| Revenues | \$4,666 | \$4,695 | \$4,710 |
| Benefits and expenses | 2,901 | 2,898 | 3,243 |
| Adjusted operating income | 1,765 | 1,797 | 1,467 |
| Realized investment gains (losses), net, and related adjustments | 2,031 | 1,588 | 521 |
| Related charges | 68 | (624) | (137) |
| Income (loss) from continuing operations before income taxes and eq | $\stackrel{\text { \$3,864 }}{ }$ | $\underline{\text { \$2,761 }}$ | $\underline{\$ 1,851}$ |

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income decreased $\$ 32$ million. Excluding the impacts of changes in the estimated profitability of the business, discussed below, adjusted operating income decreased $\$ 8$ million. The decrease was primarily driven by lower asset-based fee income, net of associated costs, as well as higher general and administrative expenses including business growth initiatives. The decrease in asset-based fee income, net of a related decrease in asset-based commissions, was driven by a decline in average variable annuity account values and the decrease in the average effective fee rate as fee rates on recent sales are generally lower than fee rates on the inforce block. This decrease was partially offset by an increase due to greater efficiency in managing product risks associated with a recently implemented asset-liability management strategy discussed below. Partially offsetting this net decline were increases in net investment income driven by higher income on non-coupon investments and higher invested assets, as well as lower amortization costs and lower interest expense. This net decline was also partially offset by the absence of certain costs for contract cancellations incurred in 2015.

Adjustments to the amortization of DAC and other costs and to the reserves for certain living and/or death benefit features of our variable annuity products resulted in a net benefit of $\$ 138$ million and $\$ 162$ million in 2016 and 2015, respectively. The net benefits primarily reflected the net impact of equity market performance on contractholder accounts and hedge effectiveness (beginning in the third quarter of 2016 as a result of our new ALM strategy) relative to our assumptions, as well as a net benefit resulting from our annual reviews and update of assumptions and other refinements.

2015 to 2014 Annual Comparison. Adjusted operating income increased $\$ 330$ million. Excluding the impacts of changes in the estimated profitability of the business, discussed below, adjusted operating income increased $\$ 39$ million. The increase was driven by higher asset-based fee income due to growth in average variable annuity account values, net of a related increase in asset-based commissions, a decline in interest expense driven by lower debt, and a decline in amortization costs. Partially offsetting this net increase were costs for contract cancellations in connection with remediation of an error in an illustration contained in certain product marketing materials, higher operating expenses and a decline in net investment income driven by lower income on non-coupon investments.

Adjustments to the amortization of DAC and other costs and to the reserves for the GMDB and GMIB features of our variable annuity products resulted in a net benefit of $\$ 162$ million and a net charge of $\$ 129$ million in 2015 and 2014, respectively. The $\$ 162$ million net benefit in 2015 primarily reflected the net impact of equity market performance on contractholder accounts relative to our assumptions, as well as a net benefit resulting from our annual review and update of assumptions. The $\$ 129$ million net charge in 2014 primarily reflected the impact of lower expected rates of return on fixed income investments within contractholder accounts and on future expected claims relative to our assumptions, which more than offset a net favorable impact from equity market performance. Partially offsetting this net charge was a net benefit resulting from the annual review and update of assumptions performed in that year.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues decreased $\$ 29$ million. Excluding the $\$ 5$ million net decrease related to the impacts of certain changes in our estimated profitability of the business discussed above, revenues decreased $\$ 24$ million, primarily driven by a decrease in policy charges and fee income, asset management and service fees and other income, primarily due to a decline in average variable annuity account values. Partially offsetting this decrease was an increase in net investment income driven by higher income on non-coupon investments and higher invested assets, and an increase in premiums reflecting an increase in annuitizations of our variable annuity contracts, with offsets in policyholders' benefits, as discussed below.

Benefits and expenses increased $\$ 3$ million. Excluding the $\$ 19$ million net increase related to the impacts of certain changes in our estimated profitability of the business discussed above, benefits and expenses decreased $\$ 16$ million. Interest credited to policyholders' account balances and amortization of DAC decreased $\$ 21$ million and $\$ 12$ million, respectively, driven by lower fee income, as discussed above. General and administrative expenses, net of capitalization, decreased $\$ 10$ million driven by lower asset management costs and lower asset-based commissions due to lower average account values, partially offset by higher operating expenses. Partially offsetting these decreases was a $\$ 25$ million increase in policyholders' benefits, including changes in reserves, primarily reflecting an increase in annuitizations of our variable annuity contracts with offsets in premiums, as discussed above.

2015 to 2014 Annual Comparison. Revenues decreased $\$ 15$ million, primarily driven by a $\$ 27$ million decrease in net investment income due to lower income on non-coupon investments, partially offset by a $\$ 19$ million increase in policy charges and fee income due to growth in average variable annuity account values.

Benefits and expenses decreased $\$ 345$ million. Excluding the $\$ 291$ million net decrease related to the impacts of certain changes in our estimated profitability of the business discussed above, benefits and expenses decreased $\$ 54$ million. Interest expense decreased $\$ 38$ million driven by lower debt and interest credited to policyholders' account balances decreased $\$ 26$ million driven by lower average account values in the general account. Partially offsetting these decreases was a $\$ 14$ million increase in policyholders' benefits driven by costs for contract cancellations, as discussed above.

## Variable Annuity Risks and Risk Mitigants

The primary risk exposures of our variable annuity contracts relate to actual deviations from, or changes to, the assumptions used in the original pricing of these products, including capital markets assumptions such as equity market returns, interest rates and market volatility, along with actuarial assumptions such as contractholder mortality, the timing and amount of annuitization and withdrawals, and contract lapses. For these risk exposures, achievement of our expected returns is subject to the risk that actual experience will differ from the assumptions used in the original pricing of these products. We currently manage our exposure to certain risks driven by capital markets fluctuations primarily through a combination of three strategies described below including Product Design Features, External Reinsurance and our Asset Liability Management Strategy.

## Product Design Features

Certain of the variable annuity contracts that we offer include an automatic rebalancing feature, also referred to as an asset transfer feature. This feature is implemented at the contract level, and transfers assets between certain variable investment sub-accounts selected by the annuity contractholder and, depending on the benefit feature, a fixed-rate account in the general account or a bond fund sub-account within the separate accounts. The automatic rebalancing feature associated with currently-sold highest daily benefit products uses a designated bond fund sub-account within the separate accounts. The transfers are based on a static mathematical formula used with the particular benefit which considers a number of factors, including, but not limited to, the impact of investment performance on the contractholder's total account value. The objective of the automatic rebalancing feature is to reduce our exposure to equity market risk and market volatility. Other product design features we utilize include, among others, asset allocation restrictions, minimum issuance age requirements and certain limitations on the amount of contractholder premiums, as well as a required minimum allocation to our general account for certain of our products. We have also introduced products that diversify our risk profile and have incorporated provisions in product design allowing frequent revisions of key pricing elements. In addition, there is diversity in our fee arrangements, as certain fees are primarily based on the benefit guarantee amount, the contractholder account value and/or premiums, which helps preserve certain revenue streams when market fluctuations cause account values to decline.

## External Reinsurance

Effective April 1, 2015, we entered into an agreement with Union Hamilton Reinsurance, Ltd. ("Union Hamilton"), an external counterparty, to reinsure approximately $50 \%$ of the Highest Daily Lifetime Income ("HDI") v.3.0 business. HDI v. 3.0 is the most current version of our "highest daily" living benefits guarantee that is available with our Prudential Premier ${ }^{\circledR}$ Retirement Variable Annuity. This reinsurance agreement covered most new HDI v.3.0 variable annuity business issued between April 1, 2015 and December 31, 2016 on a quota share basis, not to exceed Union Hamilton's quota share of $\$ 5.0$ billion for new rider premiums through December 31, 2016. From April 1, 2015 through December 31, 2016, approximately $\$ 2.9$ billion of new rider premiums were ceded to Union Hamilton under this agreement. Reinsurance on business subject to this agreement remains in force for the duration of the underlying annuity contracts. New sales of HDI v.3.0 subsequent to December 31, 2016 are not covered by this external reinsurance agreement.

## Asset Liability Management ("ALM") Strategy (including fixed income instruments and derivatives)

Under our historical hedging program to manage certain capital market risks associated with certain variable annuity living benefit guarantees, we utilized the U.S. GAAP valuation, with certain modifications, to derive a hedge target that was more reflective of our best estimate of future benefit payments, net of fees collected. Derivative positions were entered into that sought to offset the change in value of the hedge target.

During the third quarter of 2016, we implemented a new ALM strategy that utilizes a combination of both traditional fixed income instruments and derivatives to help defray potential claims associated with our variable annuity living benefit guarantees. Under the revised strategy, expected living benefit claims under less severe market conditions are managed through the accumulation of fixed income instruments and potential living benefit claims resulting from more severe market conditions are hedged using derivative instruments. We expect the revised strategy to result in more efficient management of our capital and liquidity associated with these products while continuing to mitigate fluctuations in net income due to capital markets movements.

The change in hedge strategy had no impact on how we value or account for the living benefit guarantees under U.S. GAAP. However, under the new ALM strategy, beginning in the third quarter of 2016, adjusted operating income includes the fees earned that are in excess of the estimated portion of fees required to cover expected claims and hedge costs for the economic liability. The portion of fees required to cover such costs is updated quarterly to reflect updated estimates and actual experience. The effectiveness of our hedging program as measured by comparing the change in value of our hedging assets to the change in value of the liability we are attempting to hedge will ultimately be reflected in adjusted operating income over time through the inclusion of actual hedge costs. Expected costs are updated periodically along with our expectation of claims. For adjusted operating income purposes, DAC and other costs are fully amortized over the life of the contracts proportional to our actual and estimated gross profits under the adjusted operating income framework described above. Overall, we generally expect this strategy to result in a higher portion of fees being recognized in adjusted operating income than under our prior strategy.

The following table provides a reconciliation between the liability reported under U.S. GAAP and the economic liability we intend to manage through our ALM strategy.

|  | $\begin{gathered} \text { As of December 31, } \\ 2016 \end{gathered}$ |
| :---: | :---: |
|  | (in millions) |
| U.S. GAAP liability (including non-performance risk) | \$ 8,179 |
| Non-performance risk adjustment | 7,136 |
| Subtotal | 15,315 |
| Adjustments including risk margins and valuation methodology differences | $(5,663)$ |
| Economic liability managed by ALM strategy | \$ 9,652 |

As of December 31, 2016, we have sufficient fixed income instruments and derivative assets supporting the economic liability within the entities in which the risks reside.

Under the new ALM strategy, we expect differences in the U.S. GAAP net income impact between the changes in value of the fixed income instruments and derivatives as compared to the changes in the embedded derivative liability these assets support. These differences can be primarily attributed to three distinct areas:

- Different valuation methodologies in measuring the liability we intend to cover with fixed income instruments and derivatives versus the liability reported under U.S. GAAP-The valuation methodology utilized in estimating the economic liability we intend to defray with fixed income instruments and derivatives is different from that required to be utilized to measure the liability under U.S. GAAP. The valuation of the economic liability excludes certain items that are included within the U.S. GAAP liability, such as non-performance risk ("NPR") (in order to maximize protection irrespective of the possibility of our own default), as well as risk margins (required by U.S. GAAP but different from our best estimate).
- Different accounting treatment between liabilities and assets supporting those liabilities-Under U.S. GAAP, changes in value of the embedded derivative liability and derivative instruments used to hedge a portion of the economic liability are immediately reflected in net income. In contrast, changes in fair value of fixed income instruments that support a portion of the economic liability are designated as available for sale and are not recorded in net income but rather are recorded as unrealized gains (losses) in other comprehensive income.
- General hedge results-For the derivative portion of the ALM strategy, the net hedging impact (the extent to which the changes in value of the hedging instruments offset the change in value of the portion of the economic liability we are hedging) may be impacted by a number of factors including: cash flow timing differences between our hedging instruments and the corresponding portion of the economic liability we are hedging, basis differences attributable to actual underlying contractholder funds to be hedged versus hedgeable indices, rebalancing costs related to dynamic rebalancing of hedging instruments as markets move, certain elements of the economic liability that may not be hedged (including certain actuarial assumptions), and implied and realized market volatility on the hedge positions relative to the portion of the economic liability we seek to hedge.

For the portion of our ALM strategy executed with derivatives, we enter into a range of exchange-traded, cleared and over-the-counter ("OTC") equity and interest rate derivatives including, but not limited to: equity and treasury futures; total return and interest rate swaps; and options including equity options, swaptions, and floors and caps.

The following table illustrates the net impact to our Consolidated Statements of Operations from changes in the U.S. GAAP embedded derivative liability and hedge positions, and the related amortization of DAC and other costs, for the periods indicated.

(1) Positive amount represents income; negative amount represents a loss.
(2) Net hedging impact represents the difference between the change in fair value of the risk we seek to hedge using derivatives and the change in fair value of the derivatives utilized with respect to that risk.
(3) Excludes $\$(1,523)$ million, $\$(585)$ million and $\$(3,036)$ million for 2016, 2015 and 2014, respectively, representing the impact of managing interest rate risk through capital management strategies other than hedging of particular exposures. Because this decision was based on the capital considerations of the Company as a whole, the impact was reported in Corporate and Other operations. See "-Corporate and Other."
(4) Represents risk margins and valuation methodology differences between the economic liability managed by the ALM strategy and the U.S. GAAP liability, as well as the portion of the economic liability managed with fixed income instruments.

The net gain of $\$ 1,654$ million for 2016 primarily reflected the impact of a $\$ 1,455$ million benefit from our annual review and update of assumptions, driven by modifications to both our actuarial assumptions, including updates to expected withdrawal rates, as well as economic assumptions. The net gain also reflected the changes in the portions of the U.S. GAAP liability before NPR that are excluded from our hedge target. This impact was partially offset by changes in the NPR adjustment, primarily driven by tightening of credit spreads. To a lesser extent, results also reflected net hedging impacts, primarily driven by unfavorable liability basis. Each of these items had corresponding partial offsets included in the related impacts to amortization of DAC and other costs. Amortization of DAC and other costs also included a benefit of $\$ 515$ million related to changes in our estimate of total gross profits as a result of the implementation of the new ALM strategy in the third quarter of 2016 described above.

The net gain of $\$ 894$ million for 2015 primarily reflected a $\$ 2,243$ million net benefit from the change in the NPR adjustment, driven by net increases in the base embedded derivative liability before NPR primarily due to declining interest rates and widening credit spreads. This impact was partially offset by a $\$ 547$ million net charge from changes in the value of our historically defined hedge target, and related hedge positions, primarily driven by fund underperformance relative to indices and unfavorable liability basis. Each of these items resulted in partial offsets included in the $\$ 701$ million related charge to the amortization of DAC and other costs. The net charge from the impact of assumption updates and other refinements of $\$ 34$ million resulted from our annual review and update of assumptions, primarily driven by modifications to our actuarial assumptions and other refinements. Results also reflected the changes in the portions of the U.S. GAAP liability that are excluded from our historically defined hedge target, net of related impacts to the amortization of DAC and other costs.

The net gain of $\$ 279$ million for 2014 primarily reflected a $\$ 3,824$ million net benefit from the change in the NPR adjustment driven by net increases in the base embedded derivative liability before NPR, primarily due to declining interest rates. This impact was partially offset by a $\$ 421$ million net charge from changes in the value of our historically defined hedge target and related hedge positions, primarily driven by fund underperformance relative to indices and unfavorable liability basis. Each of these items resulted in partial offsets included in the $\$ 496$ million related charge to the amortization of DAC and other costs. The net charge from the impact of assumption updates and other refinements of $\$ 631$ million was primarily driven by modifications to our actuarial assumptions, including updates to our lapse assumption, to reflect our review of emerging experience, future expectations and other data, and other refinements. Results also reflected the changes in the portions of the U.S. GAAP liability that are excluded from our historically defined hedge target, net of related impacts to the amortization of DAC and other costs. In addition, results included a net charge of $\$ 35$ million related to prior periods. See Note 1 to the Consolidated Financial Statements for additional information.

For information regarding the Capital Protection Framework we use to evaluate and support the risks of the ALM strategy, see "Liquidity and Capital Resources-Capital."

Through March 31, 2016, we reinsured living benefit guarantees issued by our domestic statutory life insurance companies to a captive reinsurance company, Pruco Re, in order to facilitate the capital markets hedging program for these living benefit guarantees. Effective April 1, 2016, as part of the Variable Annuities Recapture, living benefit guarantees and certain retirement products were recaptured. The Variable Annuities Recapture resulted in the transfer of these product risks to certain of our domestic statutory life insurance companies. The ALM strategy described above is executed within these domestic insurance companies. After the foregoing transactions, Pruco Re no longer had any material active reinsurance with affiliates. On September 30, 2016, Pruco Re was merged with and into PALAC.

## Product Specific Risks and Risk Mitigants

For certain living benefits guarantees, claims will primarily represent the funding of contractholder lifetime withdrawals after the cumulative withdrawals have first exhausted the contractholder account value. Due to the age of the in force block, limited claim payments have occurred to date, and they are not expected to increase significantly within the next five years, based upon current assumptions. The timing and amount of future claims will depend on actual returns on contractholder account value and actual contractholder behavior relative to our assumptions. The majority of our current living benefits guarantees provide for guaranteed lifetime contractholder withdrawal payments inclusive of a "highest daily" contract value guarantee. Our PDI variable annuity complements our variable annuity products with the highest daily benefit and provides for guaranteed lifetime contractholder withdrawal payments, but restricts contractholder asset allocation to a single bond fund sub-account within the separate accounts.

The majority of our variable annuity contracts with living benefits guarantees, and all new contracts sold with our highest daily living benefits feature, include risk mitigants in the form of an automatic rebalancing feature and/or inclusion in our ALM strategy. We may also utilize external reinsurance as a form of additional risk mitigation. The risks associated with the guaranteed benefits of certain legacy products that were sold prior to our development of the automatic rebalancing feature are also managed through our ALM strategy. Certain legacy GMAB products include the automatic rebalancing feature, but are not included in the ALM strategy. The PDI product and contracts with the GMIB feature have neither risk mitigant. Certain risks associated with PDI are managed through the limitation of contractholder asset allocations to a single bond fund sub-account.

For our GMDBs, we provide a benefit payable in the event of death. Our base GMDB is generally equal to a return of cumulative deposits adjusted for any partial withdrawals. Certain products include an optional enhanced GMDB based on the greater of a minimum return on the contract value or an enhanced value. We have retained the risk that the total amount of death benefit payable may be greater than the contractholder account value. However, a substantial portion of the account values associated with GMDBs are subject to an automatic rebalancing feature because the contractholder also selected a living benefit guarantee which includes an automatic rebalancing feature. All of the variable annuity account values with living benefit guarantees also contain GMDBs. The living and death benefit features for these contracts cover the same insured life and, consequently, we have insured both the longevity and mortality risk on these contracts.

The following table sets forth the risk management profile of our living benefit guarantees and GMDB features as of the periods indicated.

|  | December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
|  | Account Value | \% of <br> Total | Account Value | \% of <br> Total | Account Value | \% of <br> Total |
|  |  |  | (in millions) |  |  |  |
| Living benefit/GMDB features(1): |  |  |  |  |  |  |
| Both ALM strategy and automatic rebalancing(2) | \$106,585 | 69\% | \$106,018 | 71\% | \$110,953 | 72\% |
| ALM strategy only | 9,409 | 6\% | 9,994 | 7\% | 11,395 | 7\% |
| Automatic rebalancing only | 1,168 | 1\% | 1,393 | 1\% | 1,771 | 1\% |
| External reinsurance(3) | 2,932 | 2\% | 1,513 | 1\% | 0 | 0\% |
| PDI | 7,926 | 5\% | 4,664 | 3\% | 2,777 | 2\% |
| Other Products | 2,730 | 2\% | 2,870 | 2\% | 3,324 | 2\% |
| Total living benefit/GMDB features | \$130,750 |  | \$126,452 |  | \$130,220 |  |
| GMDB features and other(4) | 22,545 | 15\% | 22,989 | 15\% | 24,863 | 16\% |
| Total variable annuity account value | \$153,295 |  | \$149,441 |  | \$155,083 |  |

(1) All contracts with living benefit guarantees also contain GMDB features, covering the same insured contract.
(2) Contracts with living benefits that are included in our ALM strategy, and have an automatic rebalancing feature.
(3) Represents contracts subject to reinsurance transaction with external counterparty covering new business for the period April 1 , 2015 through December 31, 2016. These contracts with living benefits also have an automatic rebalancing feature.
(4) Includes contracts that have a GMDB feature and do not have an automatic rebalancing feature.

The risk profile of our variable annuity account values as of the periods above reflect our product risk diversification strategy and the runoff of legacy products over time.

## Retirement

## Operating Results

The following table sets forth the Retirement segment's operating results for the periods indicated.

|  | Year end | ded Decem | ber 31, |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  |  | in millions) |  |
| Operating results(1): |  |  |  |
| Revenues | \$12,876 | \$11,821 | \$12,077 |
| Benefits and expenses | 11,864 | 10,890 | 10,862 |
| Adjusted operating income | 1,012 | 931 | 1,215 |
| Realized investment gains (losses), net, and related adjustments | (281) | 255 | 591 |
| Related charges | (272) | (1) | (4) |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net | (21) | (581) | 151 |
| Change in experience-rated contractholder liabilities due to asset value changes | 25 | 490 | (106) |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | \$ 463 | \$ 1,094 | \$ 1,847 |

(1) Certain of our Retirement segment's non-U.S. dollar-denominated earnings are from longevity reinsurance contracts, which are denominated in British pounds sterling, and are therefore subject to foreign currency exchange rate risk. Effective January 1, 2016, the financial results of our Retirement segment include the impact of an intercompany arrangement with our Corporate and Other operations designed to mitigate the impact of exchange rate changes on the segment's U.S. dollar-equivalent earnings. For more information related to this intercompany arrangement, see "-Results of Operations-Impact of Foreign Currency Exchange Rates," above.

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income increased $\$ 81$ million. Results for 2016 reflected a net benefit of $\$ 6$ million from our annual review and update of assumptions and other refinements, driven by favorable updates to actuarial assumptions, while results for 2015 reflected no net impact from our annual review and update of assumptions. Excluding this favorable comparative impact, adjusted operating income increased $\$ 74$ million, primarily driven by higher net investment spread results, partially offset by a lower contribution from reserve experience, higher general and administrative expenses, net of capitalization, and lower fee income. The increase in net investment spread results primarily reflected higher net prepayment fee income, growth in account values and higher income on non-coupon investments, partially offset by lower reinvestment rates net of crediting rate reductions on full service general account stable value products. The lower contribution from reserve experience primarily reflected lower mortality gains on a comparative basis for pension risk transfer contracts. The increase in general and administrative expenses, net of capitalization, was primarily driven by increased legal costs. The decrease in fee income primarily reflected lower margins on full service account values. This decrease was partially offset by growth in account values and increased billed revenues.

2015 to 2014 Annual Comparison. Adjusted operating income decreased $\$ 284$ million. Results for 2015 reflected no net impact from our annual review and update of assumptions, while results for 2014 reflected a $\$ 13$ million net charge. Excluding this favorable comparative impact, adjusted operating income decreased $\$ 297$ million, primarily driven by lower net investment spread results, higher general and administrative expenses, net of capitalization, and lower fee income, partially offset by a higher contribution from reserve experience. The decrease in net investment spread results primarily reflected lower income on non-coupon investments, lower reinvestment rates, lower income on derivatives used in portfolio management and lower net prepayment fee income, partially offset by growth in account values. The increase in general and administrative expenses, net of capitalization, was primarily driven by business growth and costs associated with strategic initiatives. The decrease in fee income primarily reflected lower margins on full service account values and net outflows of investment-only stable value account values, partially offset by higher income from longevity reinsurance account values. The more favorable reserve impacts reflected higher mortality gains for pension risk transfer contracts.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues increased $\$ 1,055$ million. Premiums increased $\$ 851$ million primarily driven by pension risk transfer transactions. This increase in premiums resulted in a corresponding increase in policyholders' benefits, as discussed in benefits and expenses below. Net investment income increased $\$ 181$ million, primarily reflecting growth in account values as discussed below, higher prepayment fee income and higher income on non-coupon investments, partially offset by lower reinvestment rates.

Benefits and expenses increased $\$ 974$ million. Excluding the impact of our annual review and update of assumptions, as discussed above, benefits and expenses increased $\$ 981$ million. Policyholders' benefits, including the change in policy reserves, increased $\$ 968$ million, primarily related to the increase in premiums discussed above. Interest credited to policyholders' account balances increased $\$ 32$ million, primarily driven by higher prepayment fee income credited to experience rated account balances and growth in account values as discussed below, partially offset by the impact of crediting rate reductions on full service general account stable value account values.

2015 to 2014 Annual Comparison. Revenues decreased $\$ 256$ million. Premiums decreased $\$ 68$ million, primarily driven by more significant group annuity transactions in 2014, partially offset by ongoing premiums assumed for longevity reinsurance contracts sold in 2015. Net investment income decreased $\$ 127$ million, primarily reflecting lower income on non-coupon investments, lower reinvestment rates and lower prepayment fee income, partially offset by growth in account values. Policy charges and fee income, asset management and service fees and other income decreased $\$ 61$ million, primarily from lower fee income and lower income on derivatives used in portfolio management.

Benefits and expenses increased \$28 million. Excluding the impact of our annual review and update of assumptions, as discussed above, benefits and expenses increased $\$ 41$ million. General and administrative expenses, net of capitalization, increased $\$ 38$ million primarily driven by business growth and costs associated with strategic initiatives. Policyholders' benefits, including the change in policy reserves, increased $\$ 33$ million driven by interest accrued on benefit reserves, partially offset by a decrease in group annuity premiums, as discussed above and favorable mortality for pension risk transfer contracts. Partially offsetting these increases was a $\$ 35$ million decrease in interest credited to policyholders' account balances, primarily driven by the impact of crediting rate reductions on full service general account stable value account values.

## Account Values

Account values are a significant driver of our operating results, and are primarily driven by net additions (withdrawals) and the impact of market changes. The income we earn on our fee-based products varies with the level of fee-based account values, since many policy fees are determined by these values. The investment income and interest we credit to policyholders on our spread-based products varies with the level of general account values. To a lesser extent, changes in account values impact our pattern of amortization of DAC and VOBA and general and administrative expenses. The following table shows the changes in the account values and net additions (withdrawals) of Retirement segment products for the periods indicated. Net additions (withdrawals) are plan sales and participant deposits or additions, as applicable, minus plan and participant withdrawals and benefits. Account values include both internally- and externally-managed client balances as the total balances drive revenue for the Retirement segment. For more information on internally-managed balances, see "-Asset Management."

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Full Service: |  |  |  |
| Beginning total account value | \$188,961 | \$184,196 | \$173,502 |
| Deposits and sales | 21,928 | 25,684 | 23,934 |
| Withdrawals and benefits | $(20,127)$ | $(21,559)$ | $(22,601)$ |
| Change in market value, interest credited and interest income and other activity | 12,040 | 640 | 9,361 |
| Ending total account value | \$202,802 | \$188,961 | \$184,196 |
| Net additions (withdrawals) | \$ 1,801 | \$ 4,125 | \$ 1,333 |
| Institutional Investment Products: |  |  |  |
| Beginning total account value | \$179,964 | \$179,641 | \$149,402 |
| Additions(1) | 16,140 | 15,572 | 43,293 |
| Withdrawals and benefits | $(12,161)$ | $(15,388)$ | $(16,036)$ |
| Change in market value, interest credited and interest income | 5,299 | 3,476 | 5,833 |
| Other(2) | $(5,866)$ | $(3,337)$ | $(2,851)$ |
| Ending total account value | \$183,376 | \$179,964 | \$179,641 |
| Net additions (withdrawals) | \$ 3,979 | \$ 184 | \$ 27,257 |

(1) Additions primarily include: group annuities calculated based on premiums received; longevity reinsurance contracts calculated as the present value of future projected benefits; and investment-only stable value contracts calculated as the fair value of customers' funds held in a client-owned trust.
(2) "Other" activity includes the effect of foreign exchange rate changes associated with our United Kingdom longevity reinsurance business, net presentation of $\$ 2,914$ million in receipts offset by $\$ 2,364$ million in payments related to funding agreements backed by commercial paper which typically have maturities of less than 90 days, and changes in asset balances for externally-managed accounts.

2016 to 2015 Annual Comparison. The increase in full service account values primarily reflected the favorable changes in the market value of customer funds. The decrease in net additions was primarily driven by lower large plan sales. This decrease was partially offset by lower plan lapses, as well as net participant deposits in 2016 compared to net participant withdrawals in 2015.

The increase in institutional investment products account values primarily reflected net additions resulting from investment-only stable value accounts and pension risk transfer transactions. The increase in net additions was primarily driven by investment-only stable value accounts, which reflected net additions in 2016 compared to net withdrawals in 2015. This increase was partially offset by less net additions related to pension risk transfer transactions in 2016 as compared to 2015 and a bank-owned life insurance stable value transaction in 2015.

2015 to 2014 Annual Comparison. The increase in full service account values primarily reflected the impact of net additions in 2015. The increase in net additions was driven by higher large plan sales and lower large plan lapses, partially offset by higher net participant withdrawals.

The increase in institutional investment products account values reflected net additions resulting from significant pension risk transfer transactions and a bank-owned life insurance stable value transaction, partially offset by net withdrawals of investment-only stable value accounts. The decrease in net additions was primarily driven by two significant longevity reinsurance transactions in 2014.

## Asset Management

## Operating Results

The following table sets forth the Asset Management segment's operating results for the periods indicated.

(1) Certain of our Asset Management segment's investment activities are based in currencies other than the U.S. dollar and are therefore subject to foreign currency exchange rate risk. Effective January 1, 2016, the financial results of our Asset Management segment include the impact of an intercompany arrangement with our Corporate and Other operations designed to mitigate the impact of exchange rate changes on the segment's U.S. dollar-equivalent earnings. For more information related to this intercompany arrangement, see "-Results of Operations-Impact of Foreign Currency Exchange Rates," above.

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income increased $\$ 8$ million. The increase primarily reflected higher asset management fees, net of expenses, from an increase in average fixed income assets under management as a result of net inflows and market appreciation as well as from a favorable fee rate modification within certain real estate funds, partially offset by a decline in average equity assets under management as a result of net outflows and market volatility experienced in the first half of the year. The increase was also partially offset by lower other related revenues, net of associated expenses, primarily related to lower strategic investing results and lower equity fund-related incentive fees, net of expenses.

2015 to 2014 Annual Comparison. Adjusted operating income decreased $\$ 6$ million. Higher asset management fees from growth in assets under management were more than offset by higher expenses, including distribution costs associated with higher retail sales and expenses relating to business growth initiatives. The decrease also reflected lower other related revenues, net of expenses, primarily related to lower strategic investing results.

## Revenues and Expenses

The following table sets forth the Asset Management segment's revenues, presented on a basis consistent with the table above under "-Operating Results," by type.
$\frac{\text { Year ended December 31, }}{\frac{2016}{\left(\text { in } \frac{2015}{\text { millions })}\right.} \frac{2014}{}}$

## Revenues by type:

| Asset management fees by source: |  |  |  |
| :---: | :---: | :---: | :---: |
| Institutional customers | \$1,046 | \$ 923 | \$ 877 |
| Retail customers(1) | 707 | 764 | 720 |
| General account | 474 | 448 | 424 |
| Total asset management fees | 2,227 | 2,135 | 2,021 |
| Incentive fees | 108 | 88 | 91 |
| Transaction fees | 19 | 20 | 26 |
| Strategic investing | 25 | 30 | 45 |
| Commercial mortgage(2) | 103 | 103 | 100 |
| Other related revenues(3) | 255 | 241 | 262 |
| Service, distribution and other revenues(4) | 479 | 568 | 557 |
| Total revenues | $\stackrel{\text { \$2,961 }}{\underline{ }}$ | $\stackrel{\text { \$2,944 }}{\underline{ }}$ | \$2,840 |

(1) Consists of fees from: individual mutual funds and variable annuities and variable life insurance separate account assets; funds invested in proprietary mutual funds through our defined contribution plan products; and third-party sub-advisory relationships. Revenues from fixed annuities and the fixedrate accounts of variable annuities and variable life insurance are included in the general account.
(2) Includes mortgage origination and spread lending revenues from our commercial mortgage origination and servicing business.
(3) Future revenues will be impacted by the level and diversification of our strategic investments, the commercial real estate market, and other domestic and international markets.
(4) Includes payments from Wells Fargo under an agreement dated as of July 30, 2004, implementing arrangements with respect to money market mutual funds in connection with the combination of our retail securities brokerage and clearing operations with those of Wells Fargo. The agreement extends for ten years after termination of the Wachovia Securities joint venture, which occurred on December 31, 2009. The revenue from Wells Fargo under this agreement was $\$ 84$ million in 2016, $\$ 78$ million in 2015 and $\$ 77$ million in 2014.

2016 to 2015 Annual Comparison. Revenues increased $\$ 17$ million. Total asset management fees increased $\$ 92$ million, primarily as a result of net inflows and market appreciation within fixed income as well as from a favorable fee rate modification within certain real estate funds that occurred in the third quarter of 2016. Other related revenues increased $\$ 14$ million, primarily due to higher performancebased incentive fees related to certain fixed income hedge funds. Partially offsetting these increases was an $\$ 89$ million decrease in service, distribution and other revenues reflecting lower service and other fees as well as the deconsolidation of certain collateralized loan obligations.

Expenses increased $\$ 9$ million, as a result of business growth, higher compensation related to favorable fixed income results and higher performance-based incentive fees (included in noncontrolling interest), partially offset by the deconsolidation of certain funds, as discussed above.

2015 to 2014 Annual Comparison. Revenues increased $\$ 104$ million. Asset management fees increased $\$ 114$ million primarily as a result of higher assets under management due to positive net asset flows and market appreciation. Service, distribution and other revenues increased $\$ 11$ million reflecting higher fees from certain consolidated funds, which were partially offset by higher expenses related to noncontrolling interests in these funds. Partially offsetting these increases was a $\$ 15$ million decrease in strategic investing revenues, primarily reflecting a gain on the sale of an investment in the prior year.

Expenses increased $\$ 110$ million, including those related to business growth initiatives, commissions from higher retail sales and higher expenses related to revenues associated with certain consolidated funds, as discussed above.

## Assets Under Management

The following table sets forth assets under management by asset class and source as of the dates indicated.

(1) Consists of third-party institutional assets and group insurance contracts.
(2) Consists of: individual mutual funds and variable annuities and variable life insurance separate account assets; funds invested in proprietary mutual funds through our defined contribution plan products; and third-party sub-advisory relationships. Fixed annuities and the fixed-rate accounts of variable annuities and variable life insurance are included in the general account.

The following table sets forth the component changes in assets under management by asset source for the periods indicated.

|  | December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in billions) |  |  |
| Institutional Customers: |  |  |  |
| Beginning Assets Under Management | \$389.1 | \$370.0 | \$341.7 |
| Net additions (withdrawals), excluding money market activity: |  |  |  |
| Third-party | 5.3 | 21.2 | 0.7 |
| Affiliated. | 0.8 | (4.8) | 1.8 |
| Total | 6.1 | 16.4 | 2.5 |
| Market appreciation (depreciation) | 24.2 | 2.6 | 26.9 |
| Other increases (decreases)(1) | 12.1 | 0.1 | (1.1) |
| Ending Assets Under Management | \$431.5 | \$389.1 | \$370.0 |
| Retail Customers: |  |  |  |
| Beginning Assets Under Management . . . . . . | \$197.3 | \$186.1 | \$170.7 |
| Net additions (withdrawals), excluding money market activity: |  |  |  |
| Third-party | 0.4 | 0.8 | 4.7 |
| Affiliated | (0.5) | 9.2 | (0.5) |
| Total | (0.1) | 10.0 | 4.2 |
| Market appreciation (depreciation) | 9.1 | 1.4 | 11.6 |
| Other increases (decreases)(1) ... | 2.9 | (0.2) | (0.4) |
| Ending Assets Under Management | \$209.2 | \$197.3 | $\underline{\$ 186.1}$ |
| General Account: |  |  |  |
| Beginning Assets Under Management | \$376.7 | \$377.4 | \$357.5 |
| Net additions (withdrawals), excluding money market activity: |  |  |  |
| Third-party | 0.0 | 0.0 | 0.0 |
| Affiliated(2) | 8.9 | (1.1) | 3.9 |
| Total | 8.9 | (1.1) | 3.9 |
| Market appreciation (depreciation) | 13.3 | (1.5) | 25.8 |
| Other increases (decreases)(1) | 0.5 | 1.9 | (9.8) |
| Ending Assets Under Management | \$399.4 | \$376.7 | \$377.4 |

(1) Includes the effect of foreign exchange rate changes, net money market activity, impact of acquired business and transfers from/(to) the Retirement segment as a result of changes in the client contract form. The impact from foreign currency fluctuations, which primarily impact the general account, resulted in gains of $\$ 2.7$ billion, losses of $\$ 1.7$ billion and losses of $\$ 13.9$ billion for the years ended December 31, 2016, 2015 and 2014, respectively.
(2) General account affiliated net additions (withdrawals) includes net additions of $\$ 4.6$ billion from two significant pension risk transfer transactions in the Retirement segment for the year ended December 31, 2014.

## Strategic Investments

The following table sets forth the strategic investments of the Asset Management segment at carrying value (including the value of derivative instruments used to mitigate equity market and currency risk) by asset class and source as of the dates indicated.

|  | December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Co-Investments: |  |  |
| Real estate | \$ 165 | \$197 |
| Fixed income | 218 | 166 |
| Seed Investments: |  |  |
| Real estate | 46 | 56 |
| Public equity | 441 | 300 |
| Fixed income | 279 | 214 |
| Investments Secured by Investor Equity Commitments | 0 | 42 |
| Total | \$1,149 | \$975 |

## U.S. Individual Life and Group Insurance Division

## Individual Life

## Operating Results

The following table sets forth the Individual Life segment's operating results for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Operating results: |  |  |  |
| Revenues | \$5,355 | \$5,233 | \$5,226 |
| Benefits and expenses | 5,276 | 4,598 | 4,728 |
| Adjusted operating income | 79 | 635 | 498 |
| Realized investment gains (losses), net, and related adjustments | 58 | 166 | 1,092 |
| Related charges | (223) | (9) | (341) |
| Income (loss) from continuing operations before income taxes and equ | \$ (86) | \$ 792 | \$1,249 |

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income decreased $\$ 556$ million, primarily reflecting unfavorable comparative net impacts from our annual reviews and update of assumptions and other refinements. Results for 2016 included a $\$ 420$ million net charge from these impacts, mainly driven by a charge to accrue a liability to offset the present value of losses expected to be recognized in later years ("Profits Followed by Losses" liability, see "-Accounting Policies \& Pronouncements-Policyholder Liabilities") and a charge related to an out of period adjustment (see Note 1 to the Consolidated Financial Statements). Partially offsetting these charges was a net benefit from the impacts of other refinements. Results for 2015 included a $\$ 68$ million net benefit from our annual review and update of assumptions and other refinements, mainly driven by net favorable modifications to our economic and actuarial assumptions. Excluding these impacts, adjusted operating income decreased $\$ 68$ million, primarily driven by less favorable mortality experience, net of reinsurance, and higher general and administrative expenses driven by business growth initiatives, partially offset by a higher contribution from investment results.

2015 to 2014 Annual Comparison. Adjusted operating income increased $\$ 137$ million. Results for 2015 reflected a net benefit of $\$ 68$ million from our annual review and update of assumptions and other refinements, while results for 2014 included a $\$ 63$ million net charge from these updates. In addition, 2015 included $\$ 17$ million of costs associated with the integration of the Hartford Life Business, while the year 2014 included $\$ 32$ million of such costs. Excluding these impacts, adjusted operating income decreased $\$ 9$ million. This decrease was primarily driven by less favorable mortality experience, net of reinsurance, and a lower contribution from investment results driven by lower income on non-coupon investments, partially offset by growth of our universal and term life businesses.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues increased $\$ 122$ million. Excluding the impact of our annual reviews and update of assumptions and other refinements, as discussed above, revenues increased $\$ 199$ million. Net investment income increased $\$ 153$ million primarily reflecting higher invested assets resulting from continued business growth and higher required capital, higher prepayment fee income and higher income on non-coupon investments. Policy charges and fee income, asset management and service fees and other income increased $\$ 82$ million, primarily driven by growth in universal life business, partially offset by a decrease in the amortization of unearned revenue reserves, driven by the impact of changes in the estimated profitability of the business due to experience relative to our assumptions. Partially offsetting these increases was a $\$ 36$ million decrease in premiums, primarily driven by higher ceded reinsurance premiums which were mostly offset by reserve changes in Policyholders' benefits.

Benefits and expenses increased $\$ 678$ million. Excluding the impact of our annual reviews and update of assumptions and other refinements, as discussed above, benefits and expenses increased $\$ 267$ million. Policyholders' benefits and interest credited to account balances increased $\$ 195$ million primarily reflecting universal life business growth and less favorable mortality experience, partially offset by reserve changes for ceded reinsurance premiums discussed above. General and administrative expenses, net of capitalization, increased $\$ 40$ million primarily driven by business growth and initiatives. Interest expense increased $\$ 33$ million related to higher reserve financing costs.

2015 to 2014 Annual Comparison. Revenues increased $\$ 7$ million. Excluding the impact of our annual reviews and updates of assumptions and other refinements, as discussed above, revenues increased $\$ 98$ million. Net investment income increased $\$ 49$ million reflecting higher invested assets resulting from business growth and higher required capital, partially offset by lower investment income from unaffiliated reserve financing activity. Premiums increased $\$ 48$ million primarily driven by growth in our term life insurance business.

Benefits and expenses decreased $\$ 130$ million. Excluding the impact of our annual reviews and updates of assumptions and other refinements and costs associated with the integration of the Hartford Life Business, as discussed above, benefits and expenses increased $\$ 107$ million. Policyholders' benefits and interest credited to account balances increased $\$ 214$ million primarily reflecting universal life business growth and less favorable mortality experience, net of reinsurance. Interest expense increased $\$ 17$ million due to higher reserve financing costs. The amortization of DAC decreased $\$ 109$ million, including the impact of changes in the estimated profitability of the business due to market performance and other experience relative to our assumptions. General and administrative expenses, net of capitalization, decreased $\$ 16$ million which included lower amortization of VOBA primarily due to less favorable mortality experience and the impact of cost savings associated with the Hartford Life Business integration.

## Sales Results

The following table sets forth individual life insurance annualized new business premiums, as defined under "-Consolidated Results of Operations-Segment Measures" above, by distribution channel and product, for the periods indicated.

|  | 2016 |  |  | 2015 |  |  | 2014 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prudential Advisors | $\begin{aligned} & \text { Third } \\ & \text { Party } \end{aligned}$ | Total | Prudential Advisors | Third Party | Total | Prudential Advisors | Third Party | Total |
|  | (in millions) |  |  |  |  |  |  |  |  |
| Term Life | \$ 32 | \$168 | \$200 | \$ 33 | \$171 | \$204 | \$36 | \$145 | \$181 |
| Guaranteed Universal Life(1) | 24 | 219 | 243 | 31 | 189 | 220 | 28 | 121 | 149 |
| Other Universal Life(1) | 34 | 61 | 95 | 28 | 61 | 89 | 13 | 57 | 70 |
| Variable Life | 26 | 66 | 92 | 22 | 56 | 78 | 21 | 31 | 52 |
| Total | $\underline{\$ 116}$ | \$514 | $\underline{\$ 630}$ | \$114 | \$477 | \$591 | \$98 | \$354 | \$452 |

(1) Single pay life premiums and excess (unscheduled) premiums are included in annualized new business premiums based on a $10 \%$ credit and represented approximately $13 \%, 17 \%$ and $10 \%$ of Guaranteed Universal Life and $3 \%, 7 \%$ and $8 \%$ of Other Universal Life annualized new business premiums for the years ended December 31, 2016, 2015 and 2014, respectively.

2016 to 2015 Annual Comparison. Annualized new business premiums increased $\$ 39$ million, primarily driven by the continued impact of product enhancements in both universal and variable life as well as continued improvements in distribution execution.

2015 to 2014 Annual Comparison. Annualized new business premiums increased $\$ 139$ million, primarily driven by pricing and other actions we have taken to enhance and diversify product sales.

## Group Insurance

## Operating Results

The following table sets forth the Group Insurance segment's operating results and benefits and administrative operating expense ratios for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Operating results: |  |  |  |
| Revenues | \$5,343 | \$5,143 | \$5,357 |
| Benefits and expenses | 5,123 | 4,967 | 5,334 |
| Adjusted operating income | 220 | 176 | 23 |
| Realized investment gains (losses), net, and related adjustments | (8) | (1) | 66 |
| Related charges | (6) | (4) | (5) |
| Income from continuing operations before income taxes and equity in earnings of operating joint ventures | \$ 206 | \$ 171 | \$ 84 |
| Benefits ratio(1): |  |  |  |
| Group life(2) | 89.1\% | 88.7\% | 89.3\% |
| Group disability(2) | 75.7\% | 75.7\% | 99.8\% |
| Total group insurance(2) | 86.7\% | 86.6\% | 91.1\% |
| Administrative operating expense ratio(3): |  |  |  |
| Group life . . | 10.6\% | 11.0\% | 11.1\% |
| Group disability | 31.4\% | 34.1\% | 30.2\% |

(1) Ratio of policyholder benefits to earned premiums, policy charges and fee income.
(2) Benefits ratios reflect the impacts of our annual reviews and updates of assumptions and other refinements. Excluding these impacts, the group life, group disability and total group insurance benefits ratios were $88.5 \%, 82.9 \%$ and $87.5 \%$ for 2016 , respectively, $89.2 \%, 79.2 \%$ and $87.5 \%$ for 2015 , respectively, and $89.2 \%, 87.0 \%$ and $88.8 \%$ for 2014 , respectively.
(3) Ratio of general and administrative expenses (excluding commissions) to gross premiums plus policy charges and fee income.

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income increased $\$ 44$ million, primarily reflecting favorable comparative net impacts from our annual reviews and updates of assumptions and other refinements. Results for 2016 included a $\$ 41$ million net benefit from these updates, while results for 2015 included a $\$ 28$ million net benefit. The net benefit in 2016 was primarily driven by favorable experience related to our group disability business. Excluding the effect of these items, adjusted operating income increased $\$ 30$ million primarily reflecting more favorable underwriting results in our group life business, a higher contribution from net investment spread results, and lower net expenses, partially offset by less favorable underwriting results in our group disability business. The underwriting results in our group life business reflect a favorable impact from a reserve refinement and more favorable experience, while the underwriting results in our group disability business reflect the impact of lower claim resolutions on long-term contracts and higher benefits resulting from other claims-related charges, partially offset by the impact of fewer new claims and increased new business.

2015 to 2014 Annual Comparison. Adjusted operating income increased $\$ 153$ million, primarily reflecting favorable comparative net impacts from our annual reviews and updates of assumptions and other refinements. Results for 2015 included a $\$ 28$ million net benefit from these updates related to actuarial assumptions used in calculating both group disability and group life reserves and other refinements, while results for 2014 included a $\$ 107$ million net charge from these updates. Excluding the effect of these items, adjusted operating income increased $\$ 18$ million primarily driven by more favorable underwriting results in our group disability business and lower expenses, partially offset by a lower contribution from net investment spread results and less favorable underwriting results in our group life business. The favorable underwriting results for our group disability business reflected the impact of higher claim resolutions and fewer new claims for long-term contracts, while the less favorable underwriting results for our group life business reflected lower premiums due to lapsed business.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues increased $\$ 200$ million. Excluding a favorable comparative impact of $\$ 42$ million resulting from our annual reviews and updates of assumptions and other refinements, as discussed above, revenues increased $\$ 158$ million. The increase reflected $\$ 140$ million of higher premiums and policy charges and fee income primarily driven by the increase in new business in both our group life and group disability businesses, as well as higher premiums on existing experience-rated contracts in our group life business. Net investment income increased $\$ 21$ million driven by higher prepayment income and income from non-coupon investments.

Benefits and expenses increased $\$ 156$ million. Excluding an unfavorable comparative impact of $\$ 29$ million resulting from our annual review and update of assumptions and other refinements, as discussed above, benefits and expenses increased $\$ 127$ million. Policyholders' benefits, including the change in reserves, increased $\$ 120$ million, driven by the impact of new business for both our group life and group disability businesses, the impact of lower claim resolutions on long-term contracts in our group disability business, and higher benefits on existing experience-rated contracts in our group life business, partially offset by a decrease in general and administrative expenses.

2015 to 2014 Annual Comparison. Revenues decreased $\$ 214$ million. Excluding a favorable impact of $\$ 2$ million resulting from our annual reviews and updates of assumptions and other refinements, as discussed above, revenues decreased $\$ 216$ million. The decrease reflected $\$ 160$ million lower premiums and policy charges and fee income in both our group life and group disability businesses primarily driven by lapses resulting from continued pricing discipline on contract renewals and improved claim experience for experience-rated contracts. Net investment income decreased $\$ 27$ million driven by lower income from non-coupon investments.

Benefits and expenses decreased $\$ 367$ million. Excluding a favorable impact of $\$ 133$ million resulting from our annual review and update of assumptions and other refinements, as discussed above, benefits and expenses decreased $\$ 234$ million. Policyholders' benefits, including the change in reserves, decreased $\$ 198$ million, driven by declines in both our group disability and group life businesses, reflecting fewer claims as a result of lapses. The decline in our group disability business also reflected the impact of higher claim resolutions for long-term contracts. The decline in our group life business also reflected improved claim experience for experience-rated contracts.

## Sales Results

The following table sets forth the Group Insurance segment's annualized new business premiums, as defined under "-Segment Measures" above, for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Annualized new business premiums(1): |  |  |  |
| Group life | \$316 | \$204 | \$189 |
| Group disability | 119 | 69 | 67 |
| Total | \$435 | \$273 | \$256 |

(1) Amounts exclude new premiums resulting from rate changes on existing policies, from additional coverage under our Servicemembers' Group Life Insurance contract and from excess premiums on group universal life insurance that build cash value but do not purchase face amounts.

2016 to 2015 Annual Comparison. Total annualized new business premiums increased $\$ 162$ million as we continued to grow through sales to new and existing clients in both our group life and group disability businesses while maintaining pricing and underwriting discipline.

2015 to 2014 Annual Comparison. Total annualized new business premiums increased $\$ 17$ million primarily driven by sales to new and existing clients for our group life and group disability businesses, respectively.

## International Insurance Division

## International Insurance

## Operating Results

The results of our International Insurance operations are translated on the basis of weighted average monthly exchange rates, inclusive of the effects of the intercompany arrangement discussed in "-Impact of Foreign Currency Exchange Rates" above. To provide a better
understanding of operating performance within the International Insurance segment, where indicated below, we have analyzed our results of operations excluding the effect of the year over year change in foreign currency exchange rates. Our results of operations, excluding the effect of foreign currency fluctuations, were derived by translating foreign currencies to U.S. dollars at uniform exchange rates for all periods presented, including for constant dollar information discussed below. The exchange rates used were Japanese yen at a rate of 106 yen per U.S. dollar and Korean won at a rate of 1100 won per U.S. dollar, both of which were determined in connection with the foreign currency income hedging program discussed in "-Impact of Foreign Currency Exchange Rates" above. In addition, for constant dollar information discussed below, activity denominated in U.S. dollars is generally reported based on the amounts as transacted in U.S. dollars. Annualized new business premiums presented on a constant exchange rate basis in the "Sales Results" section below reflect translation based on these same uniform exchange rates.

The following table sets forth the International Insurance segment's operating results for the periods indicated.

| Revenues: |  |  |  |
| :---: | :---: | :---: | :---: |
| Life Planner operations | \$ 9,986 | \$ 9,172 | \$ 9,267 |
| Gibraltar Life and Other operations | 11,023 | 10,192 | 10,799 |
| Total revenues | 21,009 | 19,364 | 20,066 |
| Benefits and expenses: |  |  |  |
| Life Planner operations | 8,447 | 7,587 | 7,678 |
| Gibraltar Life and Other operations | 9,445 | 8,551 | 9,136 |
| Total benefits and expenses | 17,892 | 16,138 | 16,814 |
| Adjusted operating income: |  |  |  |
| Life Planner operations | 1,539 | 1,585 | 1,589 |
| Gibraltar Life and Other operations | 1,578 | 1,641 | 1,663 |
| Total adjusted operating income | 3,117 | 3,226 | 3,252 |
| Realized investment gains (losses), net, and related adjustments(1) | 992 | 1,215 | $(2,192)$ |
| Related charges | (32) | (60) | (59) |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net | 4 | 57 | 188 |
| Change in experience-rated contractholder liabilities due to asset value changes | (4) | (57) | (188) |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (47) | 8 | 5 |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | \$ 4,030 | \$ 4,389 | \$ 1,006 |

(1) Includes gains (losses) from changes in value of certain assets and liabilities relating to foreign currency exchange movements that are economically matched.

## Adjusted Operating Income

2016 to 2015 Annual Comparison. Adjusted operating income from our Life Planner operations decreased $\$ 46$ million including a net unfavorable impact of $\$ 97$ million from currency fluctuations, inclusive of the currency hedging program discussed above. Both periods included the impact of our annual reviews and updates of assumptions and other refinements, which resulted in a $\$ 38$ million net charge in 2016, including unfavorable economic assumption updates driven by lower interest rates in Japan and Korea, compared to an $\$ 11$ million net charge in 2015.

Excluding the effect of these items, adjusted operating income increased $\$ 78$ million, primarily reflecting the growth of business in force and continued strong persistency in Japan, and a larger contribution from non-coupon investments. These favorable impacts were partially offset by higher expenses, including those supporting business growth, and less favorable comparative mortality experience.

Adjusted operating income from our Gibraltar Life and Other operations decreased $\$ 63$ million including a net unfavorable impact of $\$ 120$ million from currency fluctuations, inclusive of the currency hedging program discussed above. Both periods included the impact of our annual reviews and updates of assumptions and other refinements which resulted in a $\$ 34$ million net charge in 2016, including unfavorable economic assumption updates driven by lower interest rates in Japan, compared to a $\$ 10$ million net charge in 2015.

Excluding the effect of these items, adjusted operating income increased $\$ 81$ million as the growth of business in force, including the contribution from the Company's investment in AFP Habitat in Chile in March of 2016, more favorable comparative mortality experience and lower net expenses, including a gain on the sale of a home office property in Japan, were partially offset by a lower contribution from net investment spreads, primarily from lower income on non-coupon investments.

2015 to 2014 Annual Comparison. Adjusted operating income from our Life Planner operations decreased $\$ 4$ million including a net unfavorable impact of $\$ 56$ million from currency fluctuations, inclusive of the currency hedging program discussed above. Both periods included the impact of our annual reviews and updates of assumptions and other refinements, which resulted in an $\$ 11$ million net charge in 2015 compared to a $\$ 17$ million net benefit in 2014. Results for 2014 also included a $\$ 24$ million net unfavorable impact primarily from reserve refinements in our Korean and Japanese operations.

Excluding the effect of these items, adjusted operating income increased $\$ 56$ million primarily reflecting growth of business in force driven by sales results and continued strong persistency, partially offset by the impacts of higher expenses supporting business growth, lower net investment spreads and less favorable mortality experience.

Adjusted operating income from our Gibraltar Life and Other operations decreased $\$ 22$ million including a net unfavorable impact of $\$ 77$ million from currency fluctuations, inclusive of the currency hedging program discussed above. Both periods included the impact of our annual reviews and updates of assumptions and other refinements which resulted in a $\$ 10$ million net charge in 2015 compared to a $\$ 15$ million net charge in 2014. Results for 2014 also included a $\$ 73$ million charge for reserve refinements, $\$ 30$ million of which was related to 2014 and $\$ 43$ million of which was related to prior periods. See Note 1 to the Consolidated Financial Statements for more information.

Excluding the effect of these items, adjusted operating income decreased $\$ 23$ million primarily reflecting higher expenses due to business growth and the absence of gains on sales of fixed assets that occurred in 2014, partially offset by a higher contribution from net investment spreads.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues from our Life Planner operations increased $\$ 814$ million including a net favorable impact of $\$ 273$ million from currency fluctuations. Excluding the impact of currency fluctuations, revenues increased $\$ 541$ million. This increase was primarily driven by higher premiums and policy charges and fee income of $\$ 380$ million related to growth of business in force. Net investment income increased $\$ 157$ million primarily reflecting investment portfolio growth related to the growth of business in force, partially offset by the impact of lower reinvestment rates.

Benefits and expenses from our Life Planner operations increased $\$ 860$ million including a net unfavorable impact of $\$ 370$ million from currency fluctuations. Excluding the impact of currency fluctuations, benefits and expenses increased $\$ 490$ million. Policyholder benefits, including changes in reserves, increased $\$ 377$ million primarily driven by business growth. General and administrative expenses, net of capitalization, increased $\$ 81$ million primarily due to higher costs, including those supporting business growth.

Revenues from our Gibraltar Life and Other operations increased $\$ 831$ million, including a net favorable impact of $\$ 386$ million from currency fluctuations. Excluding the impact of currency fluctuations, revenues increased $\$ 445$ million, driven by a $\$ 211$ million increase in premiums and policy charges and fee income due to business growth, a $\$ 116$ million increase in net investment income primarily reflecting investment portfolio growth related to the growth of business in force, partially offset by lower investment spread income, and the gain on the sale of a home office property in Japan.

Benefits and expenses from our Gibraltar Life and Other operations increased $\$ 894$ million including a net unfavorable impact of $\$ 506$ million from currency fluctuations. Excluding the impact of currency fluctuations, benefits and expenses increased $\$ 388$ million, primarily reflecting a $\$ 346$ million increase in policyholder benefits, including changes in reserves, related to business growth and $\$ 21$ million in general and administrative expenses, net of capitalization, due to higher costs, including those supporting business growth.

2015 to 2014 Annual Comparison. Revenues from our Life Planner operations decreased $\$ 95$ million including a net unfavorable impact of $\$ 857$ million from currency fluctuations. Excluding the impact of currency fluctuations, revenues increased $\$ 762$ million. This increase was primarily driven by higher premiums and policy charges and fee income of $\$ 547$ million related to growth of business in force. Net investment income increased $\$ 158$ million primarily reflecting investment portfolio growth, partially offset by the impact of lower reinvestment rates.

Benefits and expenses from our Life Planner operations decreased $\$ 91$ million including a net favorable impact of $\$ 801$ million from currency fluctuations. Excluding the impact of currency fluctuations, benefits and expenses increased $\$ 710$ million. Policyholder benefits, including changes in reserves, increased $\$ 520$ million primarily driven by business growth. General and administrative expenses, net of capitalization, increased $\$ 116$ million primarily due to higher distribution costs and other costs supporting business growth. Amortization of DAC increased $\$ 66$ million, driven by business growth.

Revenues from our Gibraltar Life and Other operations decreased $\$ 607$ million, including a net unfavorable impact of $\$ 929$ million from currency fluctuations. Excluding the impact of currency fluctuations, revenues increased $\$ 322$ million, driven by a $\$ 306$ million increase in premiums and policy charges and fee income due to business growth, and an $\$ 89$ million increase in net investment income driven by higher net investment spreads. These increases were partially offset by a decline of $\$ 57$ million in other income, primarily reflecting the absence of gains on sales of fixed assets that occurred in 2014.

Benefits and expenses from our Gibraltar Life and Other operations decreased $\$ 585$ million including a net favorable impact of $\$ 852$ million from currency fluctuations. Excluding the impact of currency fluctuations, benefits and expenses increased $\$ 267$ million, primarily reflecting a $\$ 272$ million increase in policyholder benefits, including changes in reserves, driven by business growth.

## Sales Results

The following table sets forth annualized new business premiums, as defined under "-Executive Summary—Segment Measures" above, on an actual and constant exchange rate basis for the periods indicated.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Annualized new business premiums: |  |  |  |
| On an actual exchange rate basis: |  |  |  |
| Life Planner operations | \$1,059 | \$1,117 | \$1,161 |
| Gibraltar Life | 1,726 | 1,548 | 1,584 |
| Total | \$2,785 | \$2,665 | \$2,745 |
| On a constant exchange rate basis: |  |  |  |
| Life Planner operations | \$1,298 | \$1,181 | \$1,096 |
| Gibraltar Life | 1,728 | 1,619 | 1,506 |
| Total | \$3,026 | \$2,800 | \$2,602 |

The amount of annualized new business premiums and the sales mix in terms of types and currency denomination of products for any given period can be significantly impacted by several factors, including but not limited to: the addition of new products, discontinuation of existing products, changes in credited interest rates for certain products and other product modifications, changes in interest rates or fluctuations in currency markets (as described below), changes in tax laws, changes in life insurance regulations or changes in the competitive environment. Sales volume may increase or decrease prior to certain of these changes becoming effective, and then fluctuate in the other direction following such changes.

The current low interest rate environment in Japan, as discussed further in "-Executive Summary-Impact of a Low Interest Rate Environment" above, and fluctuating currency markets have contributed to a shift in demand for certain products. Our diverse product portfolio in Japan, in terms of currency mix and premium payment mode, allows us to mitigate the negative impact from this extremely low interest rate environment. We regularly examine our yen-based product offerings and their related profitability and, as a result, we have been repricing our products and have discontinued sales of certain products that do not meet our profit expectations. The impact of these actions, coupled with the strengthening of the yen against the U.S. dollar and introduction of certain new products, has resulted in an increase in sales of products denominated in U.S. dollars relative to products denominated in other currencies.

2016 to 2015 Annual Comparison. The table below presents annualized new business premiums on a constant exchange rate basis, by product and distribution channel, for the periods indicated.

|  | Year Ended December 31, 2016 |  |  |  |  | Year Ended December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Life | $\begin{gathered} \hline \text { Accident } \\ \& \\ \text { Health } \end{gathered}$ | Retirement <br> (1) | Annuity | Total | Life | Accident \& Health | Retirement <br> (1) | Annuity | Total |
|  | (in millions) |  |  |  |  |  |  |  |  |  |
| Life Planner | \$ 765 | \$118 | \$337 | \$ 78 | \$1,298 | \$ 729 | \$116 | \$271 | \$ 65 | \$1,181 |
| Gibraltar Life: |  |  |  |  |  |  |  |  |  |  |
| Life Consultants | 366 | 56 | 117 | 208 | 747 | 347 | 61 | 126 | 134 | 668 |
| Banks(2) | 521 | 0 | 68 | 130 | 719 | 480 | 1 | 40 | 180 | 701 |
| Independent Agency | 134 | 23 | 71 | 34 | 262 | 104 | 24 | 69 | 53 | 250 |
| Subtotal | 1,021 | 79 | 256 | 372 | 1,728 | 931 | 86 | 235 | 367 | 1,619 |
| Total | \$1,786 | \$197 | \$593 | \$450 | \$3,026 | \$1,660 | \$202 | \$506 | \$432 | \$2,800 |

(1) Includes retirement income, endowment and savings variable universal life.
(2) Single pay life annualized new business premiums, which include $10 \%$ of first year premiums, and 3 -year limited pay annualized new business premiums, which include $100 \%$ of new business premiums, represented $9 \%$ and $53 \%$, respectively, of total Japanese bank distribution channel annualized new business premiums, excluding annuity products, for the year ended December 31, 2016, and $5 \%$ and $51 \%$, respectively, of total Japanese bank distribution channel annualized new business premiums, excluding annuity products, for the year ended December 31, 2015.

Annualized new business premiums, on a constant exchange rate basis, from our Life Planner operations increased $\$ 117$ million. Growth in Life Planner headcount and productivity in our Japan operation, coupled with the factors described above, resulted in an increase in sales of U.S. dollar-denominated retirement and whole life products while sales of yen-denominated term life products remained strong in the corporate market. Lower sales of life protection products in our Korean operation reflecting pricing actions were partially offset by higher sales in our Brazilian operation across various product lines as Life Planner count and average premiums continued to grow.

Annualized new business premiums, on a constant exchange rate basis, from our Gibraltar Life operations increased $\$ 109$ million. Life Consultant sales increased $\$ 79$ million as higher sales of U.S. dollar-denominated annuity and whole life products were partially offset by lower sales of yen-denominated life protection products and Australian dollar-denominated annuity and retirement income products. Bank channel sales increased $\$ 18$ million primarily driven by higher sales of U.S. dollar-denominated whole life, retirement income and annuity products, partially offset by lower sales of yen-denominated whole life and annuity products and Australian dollar-denominated annuity products. Independent Agency sales increased $\$ 12$ million as higher sales of U.S. dollar-denominated whole life and retirement
income products were partially offset by lower sales of Australian dollar-denominated annuity products and yen-denominated retirement and annuity products.

2015 to 2014 Annual Comparison. The table below presents annualized new business premiums on a constant exchange rate basis, by product and distribution channel, for the periods indicated.

|  | Year Ended December 31, 2015 |  |  |  |  | Year Ended December 31, 2014 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Life | Accident \& Health | Retirement (1) | Annuity | Total | Life | $\begin{gathered} \text { Accident } \\ \& \\ \text { Health } \end{gathered}$ | Retirement <br> (1) | Annuity | Total |
|  | (in millions) |  |  |  |  |  |  |  |  |  |
| Life Planner | \$ 729 | \$116 | \$271 | \$ 65 | \$1,181 | \$ 613 | \$100 | \$319 | \$ 64 | \$1,096 |
| Gibraltar Life: |  |  |  |  |  |  |  |  |  |  |
| Life Consultants | 347 | 61 | 126 | 134 | 668 | 330 | 64 | 123 | 142 | 659 |
| Banks(2) | 480 | 1 | 40 | 180 | 701 | 418 | 1 | 10 | 176 | 605 |
| Independent Agency | 104 | 24 | 69 | 53 | 250 | 95 | 24 | 62 | 61 | 242 |
| Subtotal | 931 | 86 | 235 | 367 | 1,619 | 843 | 89 | 195 | 379 | 1,506 |
| Total | \$1,660 | \$202 | \$506 | \$432 | \$2,800 | \$1,456 | \$189 | \$514 | \$443 | \$2,602 |

(1) Includes retirement income, endowment and savings variable universal life.
(2) Single pay life annualized new business premiums, which include $10 \%$ of first year premiums, and 3-year limited pay annualized new business premiums, which include $100 \%$ of new business premiums, represented $5 \%$ and $51 \%$, respectively, of total Japanese bank distribution channel annualized new business premiums, excluding annuity products, for the year ended December 31, 2015, and $7 \%$ and $57 \%$, respectively, of total Japanese bank distribution channel annualized new business premiums, excluding annuity products, for the year ended December 31, 2014.

Annualized new business premiums, on a constant exchange rate basis, from our Life Planner operations increased $\$ 85$ million. The increase primarily reflects growth in Life Planner headcount and productivity in our Japanese operations as well as in our Brazilian operation. The impacts resulted in an increase in sales of term life products in Japan and whole life products and accident and health products in Brazil. The increase also reflects higher sales of certain life protection products in our Korean operation.

Annualized new business premiums, on a constant exchange rate basis, from our Gibraltar Life operations increased $\$ 113$ million. Bank channel sales increased $\$ 96$ million primarily driven by higher sales of U.S. dollar-denominated whole life and retirement products as well as certain yen-denominated life protection products. Life Consultant sales increased $\$ 9$ million as higher sales of yen-denominated whole life products, U.S. dollar-denominated annuity products and Australian dollar-denominated retirement products were mostly offset by lower sales of Australian dollar-denominated annuity products. Independent Agency sales increased $\$ 8$ million primarily driven by higher sales of yen-denominated term life products and certain retirement products, partially offset by lower sales of Australian dollardenominated annuity products.

## Sales Force

The following table sets forth the number of Life Planners and Life Consultants for the periods indicated.

|  | As of December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| Life Planners: |  |  |  |
| Japan | 3,824 | 3,528 | 3,328 |
| All other countries | 3,856 | 4,064 | 4,024 |
| Gibraltar Life Consultants | 8,884 | 8,805 | 8,707 |
| Total | 16,564 | 16,397 | 16,059 |

2016 to 2015 Comparison. The number of Life Planners increased by 88, driven by an increase of 296 in Japan as a result of improved recruiting efforts and fewer terminations. Life Planners decreased by 208 in other operations, primarily in Korea, Poland and Italy, as a result of more selective recruiting efforts and restructurings, partially offset by an increase in Brazil as a result of recruiting efforts.

The number of Gibraltar Life Consultants increased by 79, primarily reflecting fewer terminations.
2015 to 2014 Comparison. The number of Life Planners increased by 240, driven by an increase of 200 in Japan as a result of recruiting efforts. Life Planner decreases in other operations, primarily in Poland and Italy, were a result of more selective recruiting efforts and validation requirements, partially offset by an increase in Brazil as a result of recruiting efforts.

The number of Gibraltar Life Consultants increased by 98, primarily reflecting improved recruiting efforts and fewer terminations.

## Corporate and Other

Corporate and Other includes corporate operations, after allocations to our business segments, and divested businesses other than those that qualify for "discontinued operations" accounting treatment under U.S. GAAP.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Operating results: |  |  |  |
| Capital debt interest expense | \$ (686) | \$ (731) | \$ (626) |
| Operating debt interest expense, net of investment income | 1 | 69 | (126) |
| Pension and employee benefits | 103 | 173 | 185 |
| Other corporate activities(1) | (999) | (824) | (781) |
| Adjusted operating income | $(1,581)$ | $(1,313)$ | $(1,348)$ |
| Realized investment gains (losses), net, and related adjustments | $(1,797)$ | (961) | $(3,656)$ |
| Related charges | (1) | 19 | 4 |
| Divested businesses | (84) | (66) | 167 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (3) | 0 | (2) |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | $\stackrel{\text { \$(3,466) }}{\underline{ }}$ | $\stackrel{\text { \$(2,321) }}{ }$ | $\stackrel{\text { \$ } 4,835)}{ }$ |

(1) Includes consolidating adjustments.

2016 to 2015 Annual Comparison. The loss from Corporate and Other operations, on an adjusted operating income basis, increased $\$ 268$ million. Net charges from other corporate activities increased $\$ 175$ million, primarily reflecting higher costs for employee compensation plans tied to Company stock and equity market returns, increased costs for enhanced regulatory supervision, costs associated with the early extinguishment of certain debt, higher legal costs, the absence of a favorable impact from escheatment related matters in the prior year and increased costs related to other corporate initiatives. The increased charges were partially offset by the absence of certain remediation costs incurred in the prior year, as described below. Results for operating debt interest expense, net of investment income, decreased $\$ 68$ million, primarily reflecting lower levels of invested assets resulting from assets transferred to other business segments and lower net investment income from non-coupon investments. This decrease was partially offset by lower operating debt interest expense resulting from efforts to reduce leverage through senior debt maturities in late 2015 and early 2016, and the early extinguishment of certain debt in the second quarter of 2016. Capital debt interest expense decreased $\$ 45$ million, primarily reflecting the reassignment of capital debt to operating debt and efforts to reduce leverage.

Results from pension and employee benefits decreased $\$ 70$ million, primarily reflecting lower income from our qualified pension plan, driven by lower expected returns on plan assets due to lower than expected plan fixed income asset growth in 2015, as well as higher interest costs on the plan obligation due to a higher discount rate.

For purposes of calculating pension income from our qualified pension plan for the year ended December 31, 2017, we will decrease the discount rate from $4.50 \%$ to $4.15 \%$ as of December 31, 2016. The expected rate of return on plan assets and the assumed rate of increase in compensation will remain unchanged at $6.25 \%$ and $4.50 \%$, respectively. Giving effect to the foregoing assumptions and other factors, we expect income from our qualified pension plan in 2017 to be approximately $\$ 35$ million to $\$ 45$ million higher than 2016 levels. The increase is driven by higher expected returns on plan assets due to higher than expected plan fixed income asset growth in 2016 as well as lower interest costs on the plan obligation due to the lower discount rate.

For purposes of calculating postretirement benefit expenses for the year ended December 31, 2017, we will decrease the discount rate from $4.35 \%$ to $4.05 \%$ as of December 31, 2016. The expected rate of return on plan assets will remain unchanged at $7.00 \%$. Giving effect to the foregoing assumptions and other factors, we expect postretirement benefit expenses in 2017 to be approximately $\$ 5$ million to $\$ 15$ million lower than 2016 levels. The decrease in expenses is driven by favorable census updates at December 31, 2016, partially offset by lower expected returns on plan assets due to lower than expected asset growth in 2016.

In 2017, pension and other postretirement benefit service costs related to active employees will continue to be allocated to our business segments. For further information regarding our pension and postretirement plans, see Note 18 to the Consolidated Financial Statements.

2015 to 2014 Annual Comparison. The loss from Corporate and Other operations, on an adjusted operating income basis, decreased $\$ 35$ million. Results for operating debt interest expense, net of investment income, increased $\$ 195$ million, reflecting higher net investment income due to higher levels of invested assets, including the transfer of assets to Corporate and Other operations related to the restructuring of the former Closed Block Business and lower operating debt interest expense due to the reassignment of operating debt to capital debt. Capital debt interest expense increased $\$ 105$ million, primarily reflecting the reassignment of operating debt to capital debt to support capital needs. Net charges from other corporate activities increased $\$ 43$ million, primarily reflecting increased retained corporate expenses, including $\$ 80$ million of estimated remediation costs related to the administration of certain separate account investments. These remediation costs consisted of compensation for the benefit of customers for performance on certain securities lending activities administered by the Company. In addition, the increased retained corporate expenses included enhanced regulatory supervision costs and a negative impact recorded in Corporate and Other operations from income translation adjustments recorded by our International Insurance segment at fixed currency exchange rates versus the actual average rates related to currencies for which we choose not to hedge our exchange rate exposure. These increases were partially offset by a favorable comparative impact from escheatment related and other items.

Results from pension and employee benefits decreased $\$ 12$ million, including higher expenses from our non-qualified pension plan driven by unfavorable census and assumption updates as of December 31, 2014. This decrease was partially offset by higher income from our qualified pension plan driven by the impact of the decline in interest rates in 2014, partially offset by the negative impact of our mortality assumption update as of December 31, 2014, following the Society of Actuaries' final issuance in October 2014 of a study of mortality rates and expected future improvement in mortality rates for U.S. benefit plan participants.

## Capital Protection Framework

"Realized investment gains (losses), net and related adjustments," which are excluded from adjusted operating income, included net losses of $\$ 1,649$ million, $\$ 673$ million and $\$ 3,694$ million for the years ended December 31, 2016, 2015 and 2014, respectively, primarily resulting from our utilization of capital management strategies to manage a portion of our interest rate risk, and reflect changes in interest rates with respect to the exposures outstanding during the respective periods. In implementing our capital management strategies, Corporate and Other may enter into intercompany derivatives with certain business segments. During 2016, primarily as a result of the change in our Individual Annuities' risk management strategy, we terminated a significant portion of the existing intercompany derivative transactions related to interest rate risk and expect to manage most of this risk within the business segments in the future. For more information on our Individual Annuities risk management strategy, see "-Executive Summary-Variable Annuities Recapture and Risk Management Strategy" and "-Individual Annuities." For more information on our Capital Protection Framework, see "-Liquidity and Capital Resources-Capital Protection Framework."

## Divested Businesses

## Divested Businesses Included in Corporate and Other

Our income from continuing operations includes results from several businesses that have been or will be sold or exited, including businesses that have been placed in wind down status that do not qualify for "discontinued operations" accounting treatment under U.S. GAAP. The results of these divested businesses are reflected in our Corporate and Other operations, but are excluded from adjusted operating income. A summary of the results of the divested businesses reflected in our Corporate and Other operations is as follows for the periods indicated:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Long-Term Care | \$(74) | \$(67) | \$171 |
| Other | (10) | 1 | (4) |
| Total diveste | \$(84) | \$(66) | \$167 |

Long-Term Care. Results for the year ended December 31, 2016 decreased compared to 2015 primarily reflecting an increase in net realized investment losses, driven by the change in market value of derivatives used in duration management. This decrease was partially offset by favorable policy experience and higher net investment income. Results for the year ended December 31, 2015 decreased compared to 2014 primarily reflecting a net realized investment loss in 2015 compared to a net realized investment gain in 2014, primarily driven by the change in market value of the derivatives used in duration management. This decrease also reflected unfavorable policy experience and an unfavorable comparative impact from our annual review and update of assumptions and other refinements.

## Closed Block Division

The Closed Block division includes certain in force traditional domestic participating life insurance and annuity products and assets that are used for the payment of benefits and policyholder dividends on these policies (collectively the "Closed Block"), as well as certain related assets and liabilities. We no longer offer these traditional domestic participating policies. See Note 12 to the Consolidated Financial Statements for additional details.

Each year, the Board of Directors of Prudential Insurance determines the dividends payable on participating policies for the following year based on the experience of the Closed Block, including investment income, net realized and unrealized investment gains, mortality experience and other factors. Although Closed Block experience for dividend action decisions is based upon statutory results, at the time the Closed Block was established, we developed, as required by U.S. GAAP, an actuarial calculation of the timing of the maximum future earnings from the policies included in the Closed Block. If actual cumulative earnings in any given period are greater than the cumulative earnings we expected, we record this excess as a policyholder dividend obligation. We will subsequently pay this excess to Closed Block policyholders as an additional dividend unless it is otherwise offset by future Closed Block performance that is less favorable than we originally expected. The policyholder dividends we charge to expense within the Closed Block division will include any change in our policyholder dividend obligation that we recognize for the excess of actual cumulative earnings in any given period over the cumulative earnings we expected in addition to the actual policyholder dividends declared by the Board of Directors of Prudential Insurance.

As of December 31, 2016, the excess of actual cumulative earnings over the expected cumulative earnings was $\$ 1,647$ million, which was recorded as a policyholder dividend obligation. Actual cumulative earnings, as required by U.S. GAAP, reflect the recognition of realized investment gains and losses in the current period, as well as changes in assets and related liabilities that support the Closed Block policies. Additionally, the accumulation of net unrealized investment gains that have arisen subsequent to the establishment of the Closed Block have been reflected as a policyholder dividend obligation of $\$ 3,011$ million at December 31, 2016, to be paid to Closed Block policyholders unless offset by future experience, with a corresponding amount reported in AOCI.

## Operating Results

The following table sets forth the Closed Block division's results for the periods indicated.

|  | Year en | ed Dece | ber 31, |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  |  | million |  |
| U.S. GAAP results: |  |  |  |
| Revenues | \$5,669 | \$6,160 | \$6,906 |
| Benefits and expenses | 5,801 | 6,102 | 7,165 |
| Income (loss) from con | \$ (132) | \$ 58 | \$ (259) |

## Income (loss) from Continuing Operations Before Income Taxes and Equity in Earnings of Operating Joint Ventures

2016 to 2015 Annual Comparison. Income from continuing operations before income taxes and equity in earnings of operating joint ventures decreased $\$ 190$ million. Results for 2016 primarily reflected a $\$ 399$ million decrease in net realized investment gains, primarily due to lower gains on equity securities, lower gains from sales of fixed maturities and less favorable changes in the value of derivatives used in risk management activities. Net investment income decreased $\$ 75$ million, primarily due to lower returns on non-coupon investments and lower reinvestment rates, partially offset by higher prepayment fee income. Net insurance activity results increased $\$ 35$ million, primarily due to lower benefit payments. As a result of the above and other variances, a $\$ 48$ million reduction in the policyholder dividend obligation was recorded in 2016, compared to a $\$ 137$ million increase in 2015. For a discussion of Closed Block division realized investment gains (losses), net, see "-Realized Investment Gains and Losses."

2015 to 2014 Annual Comparison. Income from continuing operations before income taxes and equity in earnings of operating joint ventures increased $\$ 317$ million, reflecting the absence of a $\$ 487$ million charge representing a make-whole provision for early redemption of the IHC Debt and the cost of terminating associated interest rate swaps, $\$ 13$ million of bank and legal fees related to the IHC Debt redemption and Class B Repurchase and $\$ 13$ million for the acceleration of the amortization of IHC Debt issuance cost in 2014. Excluding the effects of these items, income from continuing operations before income taxes and equity in earnings of operating joint ventures decreased $\$ 196$ million, reflecting a $\$ 367$ million decrease in net realized investment gains primarily due to lower gains from sales of fixed maturities, less favorable changes in the value of derivatives and higher impairments of invested assets. Net investment income decreased $\$ 354$ million primarily due to the sale and transfer of invested assets as a result of the restructuring of the former Closed Block Business and lower income from non-coupon investments. Net insurance activity results declined $\$ 104$ million primarily reflecting the runoff of policies in force and higher dividends to policyholders as a result of an increase in the 2015 and 2016 dividend scales. General and administrative expenses, inclusive of interest expense, declined $\$ 122$ million primarily driven by lower interest expense, reflecting the redemption in 2014 of the IHC Debt. As a result of the above and other variances, a $\$ 137$ million increase in the policyholder dividend obligation was recorded in 2015, compared to a \$671 million increase in 2014.

## Revenues, Benefits and Expenses

2016 to 2015 Annual Comparison. Revenues decreased $\$ 491$ million, primarily due to a $\$ 399$ million decrease in net realized investment gains and a $\$ 75$ million decrease in net investment income, as discussed above.

Benefits and expenses decreased $\$ 301$ million, primarily due to a $\$ 189$ million decrease in dividends to policyholders, reflecting a decrease in the policyholder dividend obligation expense due to changes in cumulative earnings. In addition, policyholders' benefits, including changes in reserves, decreased $\$ 83$ million, primarily due to the runoff of policies in force.

2015 to 2014 Annual Comparison. Revenues decreased $\$ 746$ million, primarily driven by a $\$ 354$ million decrease in net investment income and a $\$ 328$ million decrease in net realized investment gains, as discussed above. The $\$ 328$ million decrease in net realized investment gains included the absence of $\$ 39$ million realized loss from termination of interest rate swaps related to the early redemption of the IHC Debt in 2014. In addition, premiums declined $\$ 35$ million, primarily due to the runoff of policies in force.

Benefits and expenses decreased $\$ 1,063$ million, primarily driven by a $\$ 596$ million decrease in general and administrative expenses, inclusive of interest expense, including the absence of a $\$ 448$ million charge on a make-whole provision for early redemption of the IHC Debt, $\$ 13$ million of bank and legal fees related to the IHC Debt redemption and Class B Repurchase and $\$ 13$ million for the acceleration of the amortization of IHC Debt issuance cost in 2014, as discussed above. Dividends to policyholders decreased $\$ 505$ million, reflecting a decrease in the policyholder dividend obligation expense due to changes in cumulative earnings, partially offset by an increase in dividends paid and accrued to policyholders as a result of an increase in the 2015 and 2016 dividend scales.

## Income Taxes

Shown below is our income tax provision for the years ended December 31, 2016, 2015 and 2014, separately reflecting the impact of certain significant items.

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Tax provision (benefit) | \$1,335 | \$2,072 | \$ 349 |
| Impact of: |  |  |  |
| Non-taxable investment income | 352 | 341 | 381 |
| Foreign taxes at other than U.S. rate | 172 | 51 | (146) |
| Low income housing and other tax credits | 118 | 116 | 127 |
| Reversal of acquisition opening balance sheet deferred tax items | 0 | 0 | (53) |
| Change in repatriation assertion | 0 | 3 | (32) |
| Change in law: active financing exception | 0 | 108 | 0 |
| Other | 20 | 28 | (10) |
| Tax provision (benefit) excluding these items | \$1,997 | \$2,719 | \$ 616 |

2016 to 2015 Annual Comparison. Our income tax provision, on a consolidated basis, amounted to an income tax expense of $\$ 1,335$ million in 2016 compared to an expense of $\$ 2,072$ million in 2015. The decreased expense was primarily due to a decrease in "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" in 2016 compared to 2015. On March 31, 2016, the government of Japan enacted an approximately two percentage points reduction in the Japanese tax rate, effective April 1, 2016. On March 31, 2015, the government of Japan enacted an approximately two percentage points reduction in the Japanese tax rate, effective April 1, 2015. As a result, the impact of lower "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" in 2016 compared to 2015 was partially offset by $\$ 24$ million and $\$ 75$ million of additional tax expense related to re-measurement of Japan deferred tax assets at the new rates during 2016 and 2015, respectively.

Our income tax provision related to foreign operations, on a consolidated basis, amounted to an income tax expense of $\$ 1,158$ million in 2016 compared to an income tax expense of $\$ 742$ million in 2015 . The foreign operations income tax expense increased primarily due to the increase in foreign operations pre-tax income from continuing operations before income taxes and equity in earnings of operating joint ventures partially offset by the impact of tax rate changes in Japan during 2015 and 2016.

2015 to 2014 Annual Comparison. Our income tax provision, on a consolidated basis, amounted to an income tax expense of $\$ 2,072$ million in 2015 compared to an expense of $\$ 349$ million in 2014. The increased expense was primarily due to an increase in "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" in 2015 compared to 2014. In addition, during the fourth quarter of 2014, we changed the repatriation assertion for our Japanese insurance companies with respect to post-2013 operating earnings and AOCI, except realized and unrealized capital gains and losses. On March 31, 2015, the government of Japan enacted an approximately two percentage points reduction in the Japanese tax rate, effective April 1, 2015. Our income tax provision for 2015 reflects a tax benefit from the lower Japan tax rate for indefinitely reinvested earnings of our Japanese insurance operations, partially offset by $\$ 75$ million of additional tax expense related to the revaluation of Japan's deferred tax asset. In addition, in December 2015, Congress enacted legislation renewing the Active Financing Exception ("AFE"), retroactive to January 1, 2015 and making the provision a permanent part of the U.S. tax code. As a result of the change in tax law, deferred tax liabilities associated with Prudential of Korea's and Prudential of Taiwan's unrealized investment gains were reversed in the fourth quarter of 2015, and an additional tax benefit of $\$ 108$ million was reflected in our income tax provision for 2015.

Our income tax provision related to foreign operations, on a consolidated basis, amounted to an income tax expense of $\$ 742$ million in 2015 compared to an income tax benefit of $\$ 456$ million in 2014. The foreign operations income tax expense increased primarily due to the increase in foreign operations pre-tax income from continuing operations before income taxes and equity in earnings of operating joint ventures partially offset by the impact of tax rate changes in Japan during 2014 and 2015. We employ various tax strategies, including strategies to minimize the amount of taxes resulting from realized capital gains. For additional information regarding income taxes, see Note 19 to the Consolidated Financial Statements.

## Experience-Rated Contractholder Liabilities, Trading Account Assets Supporting Insurance Liabilities and Other Related Investments

Certain products included in the Retirement and International Insurance segments are experience-rated in that investment results associated with these products are expected to ultimately accrue to contractholders. The majority of investments supporting these experience-rated products are classified as trading and are carried at fair value. These trading investments are reflected on the Consolidated Statements of Financial Position as "Trading account assets supporting insurance liabilities, at fair value" ("TAASIL"). Realized and unrealized gains (losses) for these investments are reported in "Other income." Interest and dividend income for these investments is reported in "Net investment income." To a lesser extent, these experience-rated products are also supported by derivatives and commercial mortgage and other loans. The derivatives that support these experience-rated products are reflected on the Consolidated Statements of Financial Position as "Other long-term investments" and are carried at fair value, and the realized and unrealized gains (losses) are reported in "Realized investment gains (losses), net." The commercial mortgage and other loans that support these experience-rated products are carried at unpaid principal, net of unamortized discounts and an allowance for losses, and are reflected on the Consolidated Statements of Financial Position as "Commercial mortgage and other loans." Gains (losses) on sales and changes in the valuation allowance for commercial mortgage and other loans are reported in "Realized investment gains (losses), net."

Our Retirement segment has two types of experience-rated products that are supported by TAASIL and other related investments. Fully participating products are those for which the entire return on underlying investments is passed back to the policyholders through a corresponding adjustment to the related liability, primarily classified in the Consolidated Statements of Financial Position as "Policyholders' account balances." The adjustment to the liability is based on changes in the fair value of all of the related assets, including commercial mortgage and other loans, which are carried at amortized cost, less any valuation allowance. Partially participating products are those for which only a portion of the return on underlying investments is passed back to the policyholders over time through changes to the contractual crediting rates. The crediting rates are typically reset semiannually, often subject to a minimum crediting rate, and returns are required to be passed back within ten years.

In our International Insurance segment, the experience-rated products are fully participating. As a result, the entire return on the underlying investments is passed back to policyholders through a corresponding adjustment to the related liability.

Adjusted operating income excludes net investment gains (losses) on TAASIL, related derivatives and commercial mortgage and other loans. This is consistent with the exclusion of realized investment gains (losses) with respect to other investments supporting insurance liabilities managed on a consistent basis. In addition, to be consistent with the historical treatment of charges related to realized investment gains (losses) on investments, adjusted operating income also excludes the change in contractholder liabilities due to asset value changes in the pool of investments (including changes in the fair value of commercial mortgage and other loans) supporting these experience-rated contracts, which are reflected in "Interest credited to policyholders' account balances." The result of this approach is that adjusted operating income for these products includes net fee revenue and interest spread we earn on these experience-rated contracts, and excludes changes in fair value of the pool of investments, both realized and unrealized, that we expect will ultimately accrue to the contractholders.

The following table sets forth the impact on results for the periods indicated of these items that are excluded from adjusted operating income:

| Year ended December 31, |
| :--- |
| $2016 \underset{\text { (in millions) }}{\frac{2015}{2014}}$ |

## Retirement Segment:

Investment gains (losses) on:

| Trading account assets supporting insurance liabilities, net | \$(21) | \$(581) | \$ 151 |
| :---: | :---: | :---: | :---: |
| Derivatives | (10) | 138 | (32) |
| Commercial mortgages and other loans | 5 | 4 | 12 |
| in experience-rated contractholder liabilities due to asset value changes(1)(2) | 25 | 490 | (106) |
| gains (losses) | \$ (1) |  | \$ 25 |
| tional Insurance Segment: |  |  |  |
| ent gains (losses) on trading account assets supporting insurance liabilities, net in experience-rated contractholder liabilities due to asset value changes . |  | $\begin{gathered} \$ 57 \\ \\ \hline \end{gathered}$ | $\begin{gathered} \$ 188 \\ (188) \\ \hline \end{gathered}$ |
| gains (losses) |  | \$ 0 |  |

Total:
Investment gains (losses) on:

| Trading account assets supporting insurance liabilities, net | \$(17) | \$(524) | \$ 339 |
| :---: | :---: | :---: | :---: |
| Derivatives | (10) | 138 | (32) |
| Commercial mortgages and other loans | 5 | 4 | 12 |
| in experience-rated contractholder liabilities due to asset value changes(1)(2) | 21 | 433 | (294) |
| gains (losses) | \$ (1) |  |  |

(1) Decreases to contractholder liabilities due to asset value changes are limited by certain floors and therefore do not reflect cumulative declines in recorded asset values of $\$ 10$ million, $\$ 15$ million and $\$ 2$ million as of December 31, 2016, 2015 and 2014, respectively. We have recovered and expect to recover in future periods these declines in recorded asset values through subsequent increases in recorded asset values or reductions in crediting rates on contractholder liabilities.
(2) Included in the amounts above related to the change in the liability to contractholders as a result of commercial mortgage and other loans are an increase of $\$ 4$ million, a decrease of $\$ 64$ million and a decrease of $\$ 1$ million for the years ended December 31, 2016, 2015 and 2014, respectively. As prescribed by U.S. GAAP, changes in the fair value of commercial mortgage and other loans held for investment in our general account, other than when associated with impairments, are not recognized in income in the current period, while the impact of these changes in fair value are reflected as a change in the liability to fully participating contractholders in the current period.

The net impacts for the Retirement segment of changes in experience-rated contractholder liabilities and investment gains (losses) on trading account assets supporting insurance liabilities and other related investments reflect timing differences between the recognition of the mark-to-market adjustments and the recognition of the recovery of these adjustments in future periods through subsequent increases in asset values or reductions in crediting rates on contractholder liabilities for partially participating products. These impacts also reflect the difference between the fair value of the underlying commercial mortgage and other loans and the amortized cost, less any valuation allowance, of these loans, as described above.

## Valuation of Assets and Liabilities

## Fair Value of Assets and Liabilities

The authoritative guidance related to fair value measurement establishes a framework that includes a three-level hierarchy used to classify the inputs used in measuring fair value. The level in the hierarchy within which the fair value falls is determined based on the lowest level input that is significant to the measurement. The fair values of assets and liabilities classified as Level 3 include at least one significant unobservable input in the measurement. See Note 20 to the Consolidated Financial Statements for an additional description of the valuation hierarchy levels as well as for the balances of assets and liabilities measured at fair value on a recurring basis by hierarchy level presented on a consolidated basis.

The table below presents the balances of assets and liabilities measured at fair value on a recurring basis, as of the periods indicated, and the portion of such assets and liabilities that are classified in Level 3 of the valuation hierarchy. The table also provides details about these assets and liabilities excluding those held in the Closed Block division. We believe the amounts excluding the Closed Block division are most relevant to an understanding of our operations that are pertinent to investors in Prudential Financial because substantially all Closed Block division assets support obligations and liabilities relating to the Closed Block policies only. See Note 12 to the Consolidated Financial Statements for further information on the Closed Block.

|  |  | s of Decen | 31, 2016 |  |  | As of Decem | er 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFI exclud Block D | ing Closed Division | Closed Divi | Block sion | PFI exclud Block D | ing Closed ivision | Closed Divi | Block ion |
|  | Total at Fair Value | Total Level 3(1) | Total at Fair Value | Total Level 3(1) | Total at Fair Value | Total Level 3(1) | Total at Fair Value | Total Level 3(1) |
|  |  |  |  | (in mi | lions) |  |  |  |
| Fixed maturities, available-for-sale | \$282,515 | \$ 5,501 | \$38,904 | \$1,356 | \$252,528 | \$ 4,598 | \$37,795 | \$1,022 |
| Trading account assets: |  |  |  |  |  |  |  |  |
| Fixed maturities | 23,143 | 747 | 160 | 0 | 29,091 | 840 | 176 | 0 |
| Equity securities | 2,267 | 429 | 124 | 58 | 2,240 | 537 | 112 | 52 |
| All other(2) | 1,760 | 1 | 0 | 0 | 3,361 | 5 | 0 | 0 |
| Subtotal | 27,170 | 1,177 | 284 | 58 | 34,692 | 1,382 | 288 | 52 |
| Equity securities, available-for-sale | 7,176 | 253 | 2,572 | 12 | 6,547 | 264 | 2,727 | 2 |
| Commercial mortgage and other loans | 519 | 0 | 0 | 0 | 274 | 0 | 0 | 0 |
| Other long-term investments(3) | 146 | 7 | 3 | 0 | 172 | 39 | 10 | 10 |
| Short-term investments | 6,383 | 1 | 799 | 0 | 6,270 | 0 | 1,217 | 0 |
| Cash equivalents | 7,108 | 0 | 1,198 | 0 | 13,143 | 0 | 1,065 | 0 |
| Other assets | 0 | 0 | 0 | 0 | 16 | 7 | 0 | 0 |
| Subtotal excluding separate account assets | 331,017 | 6,939 | 43,760 | 1,426 | 313,642 | 6,290 | 43,102 | 1,086 |
| Separate account assets(3) | 262,017 | 1,849 | 0 | 0 | 259,909 | 1,995 | 0 | 0 |
| Total assets | \$593,034 | \$ 8,788 | \$43,760 | \$1,426 | \$573,551 | \$ 8,285 | \$43,102 | \$1,086 |
| Future policy benefits | \$ 8,238 | \$ 8,238 | \$ 0 | \$ 0 | \$ 8,434 | \$ 8,434 | \$ 0 | \$ 0 |
| Other liabilities(2) | 368 | 22 | 1 | 0 | 32 | 2 | 1 | 0 |
| Notes issued by consolidated variable interest e ("VIEs") | 1,839 | 1,839 | 0 | 0 | 8,597 | 8,597 | 0 | 0 |
| Total liabilities | \$ 10,445 | \$10,099 | \$ 1 | \$ 0 | \$ 17,063 | \$17,033 | \$ 1 | \$ 0 |

(1) The amount of Level 3 assets taken as a percentage of total assets measured at fair value on a recurring basis for PFI excluding the Closed Block division and for the Closed Block division totaled $1.5 \%$ and $3.3 \%$, respectively, as of December 31, 2016 and $1.4 \%$ and $2.5 \%$ as of December $31,2015$.
(2) "All other" and "Other liabilities" primarily include derivatives. The amounts classified as Level 3 exclude the impact of netting.
(3) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-07.

The determination of fair value, which for certain assets and liabilities is dependent on the application of estimates and assumptions, can have a significant impact on our results of operations and may require the application of a greater degree of judgment depending on market conditions, as the ability to value assets and liabilities can be significantly impacted by a decrease in market activity or a lack of transactions executed in an orderly manner. The following sections provide information regarding certain assets and liabilities which are valued using Level 3 inputs and could have a significant impact on our results of operations.

## Fixed Maturity and Equity Securities

Fixed maturity securities included in Level 3 in our fair value hierarchy are generally priced based on internally-developed valuations or indicative broker quotes. For certain private fixed maturity and equity securities, the internally-developed valuation model uses significant unobservable inputs and, accordingly, such securities are included in Level 3 in our fair value hierarchy. Level 3 fixed maturity securities for PFI excluding the Closed Block division included approximately $\$ 4.4$ billion of public fixed maturities as of December 31, 2016 with values primarily based on indicative broker quotes, and approximately $\$ 1.8$ billion of private fixed maturities, with values primarily based on internally-developed models. Significant unobservable inputs used included: issue specific credit adjustments, material non-public financial information, management judgment, estimation of future earnings and cash flows, default rate assumptions, liquidity assumptions and indicative quotes from market makers. These inputs are usually considered unobservable, as not all market participants have access to this data.

The impact our determination of fair value for fixed maturity and equity securities has on our results of operations is dependent on our classification of the security as either trading, available-for-sale, or held-to-maturity. For our investments classified as trading, the impact of changes in fair value is recorded within "Other income." For our investments classified as available-for-sale, the impact of changes in fair value is recorded as an unrealized gain or loss in AOCI, a separate component of equity. Our investments classified as held-to-maturity are carried at amortized cost.

## Separate Account Assets

Separate account assets included in Level 3 primarily include corporate securities and commercial mortgage loans. The valuation of corporate securities are determined as described above for fixed maturity and equity securities. See Note 20 to the Consolidated Financial Statements for additional information on the valuation of commercial mortgage loans. Separate account liabilities are reported at contract value and not at fair value.

## Variable Annuity Living Benefit Features

Future policy benefits classified in Level 3 primarily include liabilities related to guarantees associated with the living benefit features of certain variable annuity contracts offered by our Individual Annuities segment, including GMAB, GMWB and GMIWB. These benefits are accounted for as embedded derivatives and carried at fair value with changes in fair value included in "Realized investment gains (losses), net." The fair values of the GMAB, GMWB and GMIWB liabilities are calculated as the present value of future expected benefit payments to customers less the present value of future rider fees attributable to the embedded derivative feature. This methodology could result in either a liability or contra-liability balance, based on capital market conditions and various policyholder behavior assumptions. Since there is no observable active market for the transfer of these obligations, the valuations are calculated using internally-developed models with option pricing techniques. These models utilize significant assumptions that are primarily unobservable, including assumptions as to lapse rates, NPR, utilization rates, withdrawal rates, mortality rates and equity market volatility. Future policy benefits classified as Level 3 for PFI excluding the Closed Block division were a net liability of $\$ 8.2$ billion as of December 31, 2016. For additional information, see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management DivisionIndividual Annuities."

## Notes Issued by Consolidated VIEs

As discussed in Note 5 to the Consolidated Financial Statements, notes issued by consolidated VIEs represent non-recourse notes issued by certain asset-backed investment vehicles, primarily collateralized loan obligations, which we are required to consolidate. We have elected the fair value option for these notes, which are valued based on corresponding bank loan collateral.

For additional information about the key estimates and assumptions used in our determination of fair value, see Note 20 to the Consolidated Financial Statements.

## Realized Investment Gains and Losses

Realized investment gains and losses are generated from numerous sources, including the following significant items:

- sale of investments;
- maturities of foreign-denominated investments;
- adjustments to the cost basis of investments for OTTI;
- recognition of OTTI in earnings for foreign-denominated securities that are approaching maturity and are in an unrealized loss position due to foreign currency exchange rate movements;
- net changes in the allowance for losses, certain restructurings and foreclosures on commercial mortgage and other loans; and
- fair value changes on embedded derivatives and free-standing derivatives that do not qualify for hedge accounting treatment.

Effective January 1, 2016, the Company classifies fixed maturity prepayment fees and call premiums in "Net investment income" rather than "Realized investment gains (losses), net." The impact of this change to prior periods was immaterial.

The level of OTTI generally reflects economic conditions and is expected to increase when economic conditions worsen and to decrease when economic conditions improve. Historically, the causes of OTTI have been specific to each individual issuer and have not directly resulted in impairments to other securities within the same industry or geographic region. We may also realize additional credit and interest rate-related losses through sales of investments pursuant to our credit risk and portfolio management objectives. For additional information regarding our policies regarding OTTI for fixed maturity and equity securities, see Note 2 to the Consolidated Financial Statements.

We use interest rate and currency derivatives to manage interest and currency exchange rate exposures arising from mismatches between assets and liabilities, including duration mismatches. We also use derivative contracts to mitigate the risk that unfavorable changes in currency exchange rates will materially affect U.S. dollar-equivalent earnings generated by certain of our non-U.S. businesses. In addition, equity-based and interest rate derivatives hedge a portion of the risks embedded in certain variable annuity products with optional living benefit guarantees. Many of these derivative contracts do not qualify for hedge accounting; and consequently, we recognize the changes in fair value of such contracts from period to period in current earnings, although the required accounting for associated hedged assets and liabilities may or may not be similar.

Accordingly, realized investment gains and losses from our derivative activities can contribute significantly to fluctuations in net income. For a further discussion of living benefit guarantees and related hedge positions in our Individual Annuities segment, see "-Results of Operations by Segment-U.S. Retirement Solutions and Investment Management Division-Individual Annuities" above.

Adjusted operating income generally excludes "Realized investment gains (losses), net," subject to certain exceptions. These exceptions primarily include realized investment gains or losses within certain of our businesses for which such gains or losses are a principal source of earnings, gains or losses associated with terminating hedges of foreign currency earnings and current period yield adjustments and related charges and adjustments. OTTI, interest rate-related losses and credit-related losses on sales (other than those related to certain of our businesses which primarily originate investments for sale or syndication to unrelated investors) are excluded from adjusted operating income. Additionally, adjusted operating income generally excludes realized investment gains and losses from products that contain embedded derivatives, and from associated derivative portfolios that are part of an asset liability management program related to the risk of those products. However, the effectiveness of the hedging program will ultimately be reflected in adjusted operating income over time. For additional details regarding adjusted operating income, see Note 22 to the Consolidated Financial Statements.

The following table sets forth "Realized investment gains (losses), net," by investment type as well as related charges and adjustments for the periods indicated:

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Realized investment gains (losses), net: |  |  |  |
| PFI excluding Closed Block division | \$1,760 | \$3,192 | \$ 475 |
| Closed Block division | 434 | 833 | 1,161 |
| Consolidated realized investment gains (losses), net | \$2,194 | \$4,025 | \$ 1,636 |
| PFI excluding Closed Block Division: |  |  |  |
| Realized investment gains (losses), net: |  |  |  |
| Fixed maturity securities | \$ 617 | \$1,431 | \$ 753 |
| Equity securities | 127 | 4 | 81 |
| Commercial mortgage and other loans | 54 | 36 | 79 |
| Derivative instruments | 1,013 | 1,775 | (445) |
| Other | (51) | (54) | 7 |
| Total | \$1,760 | \$3,192 | \$ 475 |
| Related adjustments | (771) | (934) | $(4,063)$ |
| Realized investment gains (losses), net, and related adjustments | 989 | 2,258 | $(3,588)$ |
| Related charges | (466) | (679) | (542) |
| Realized investment gains (losses), net, and related charges and adjustments | \$ 523 | \$1,579 | \$(4,130) |
| Closed Block Division: |  |  |  |
| Realized investment gains (losses), net: |  |  |  |
| Fixed maturity securities | \$ 49 | \$ 203 | \$ 441 |
| Equity securities | 249 | 447 | 431 |
| Commercial mortgage and other loans | 1 | 1 | 31 |
| Derivative instruments | 162 | 195 | 263 |
| Other | (27) | (13) | (5) |
| Total | \$ 434 | \$ 833 | \$ 1,161 |

## 2016 to 2015 Annual Comparison

## PFI excluding Closed Block Division

The following table sets forth net realized gains (losses) on fixed maturity securities, as of the dates indicated:

|  | Year Ended December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Gross realized investment gains: |  |  |
| Gross gains on sales and maturities(1) | \$1,229 | \$1,809 |
| Gross realized investment losses: |  |  |
| Net OTTI recognized in earnings(2) | (144) | (97) |
| Gross losses on sales and maturities(3) | (456) | (273) |
| Credit-related losses on sales | (12) | (8) |
| Total gross realized investment losses | (612) | (378) |
| Realized investment gains (losses), net-Fixed Maturity Securities | \$ 617 | \$1,431 |
| Net gains (losses) on sales and maturities-Fixed Maturity Securities(1) | \$ 773 | \$1,536 |

[^2]Net gains on sales and maturities of fixed maturity securities were $\$ 773$ million in 2016. Excluding energy sector losses, net gains of $\$ 966$ million were primarily from sales and maturities of U.S. dollar-denominated securities within our International Insurance segment. The net gains in 2016 were partially offset by net trading losses of approximately $\$ 193$ million on sales of securities within the energy sector. Net gains on sales and maturities of fixed maturity securities were $\$ 1,536$ million in 2015 primarily due to net gains of $\$ 1,363$ million on sales and maturities of U.S. dollar-denominated securities within our International Insurance segment. See below for additional information regarding the OTTI of fixed maturity securities in 2016 and 2015.

Net realized gains on equity securities were $\$ 127$ million and $\$ 4$ million for the years ended December 31, 2016 and 2015, respectively, and included net gains on sales of equity securities of $\$ 188$ million and $\$ 115$ million, respectively. Both periods' gains were partially offset by OTTI of $\$ 61$ million and $\$ 111$ million for the years ended December 31, 2016 and 2015, respectively. See below for additional information regarding the OTTI of equity securities in 2016 and 2015.

Net realized gains on commercial mortgage and other loans for the year ended December 31, 2016 were $\$ 54$ million, primarily driven by servicing revenue of $\$ 53$ million in our Asset Management business and a net decrease in the allowance for losses of $\$ 5$ million. Net realized gains on commercial mortgage and other loans for the year ended December 31, 2015 were $\$ 36$ million, primarily driven by servicing revenue of $\$ 31$ million in our Asset Management business and a net decrease in the allowance for losses of $\$ 5$ million. For additional information regarding our allowance for losses, see "-General Account Investments-Commercial Mortgage and Other Loans-Commercial Mortgage and Other Loan Quality" below.

Net realized gains on derivatives were $\$ 1,013$ million and $\$ 1,775$ million for the years ended December 31, 2016 and 2015, respectively. The net derivative gains in 2016 primarily reflect $\$ 523$ million of gains on product-related embedded derivatives and related hedge positions mainly associated with certain variable annuity contracts, $\$ 192$ million of gains on currency derivatives in Japan operations used to hedge non-Japanese yen denominated investments as the Japanese yen strengthened against various currencies, $\$ 172$ million of gains on currency derivatives in U.S. operations used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies and $\$ 157$ million of gains primarily representing the fees earned on fee-based guaranteed investment contracts ("GICs") which are accounted for as derivatives. The net gains in 2015 primarily reflect $\$ 995$ million of gains on product-related embedded derivatives and related hedge positions mainly associated with certain variable annuity contracts, $\$ 326$ million of gains on interest rate derivatives used to manage duration as interest rates decreased, $\$ 345$ million of gains on foreign currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies and $\$ 159$ million of gains primarily representing fees earned on fee-based GICs.

Related adjustments include the portions of "Realized investment gains (losses), net" that are included in adjusted operating income and the portions of "Other income" and "Net investment income" that are excluded from adjusted operating income. These adjustments are made to arrive at "Realized investment gains (losses), net, and related adjustments" which are excluded from adjusted operating income. Results for 2016 and 2015 included net negative related adjustments of $\$ 771$ million and $\$ 934$ million, respectively, primarily driven by settlements on interest rate and currency derivatives.

Charges that relate to "Realized investment gains (losses), net" are also excluded from adjusted operating income, and may be reflected as net charges or net benefits. Results for 2016 included net related charges of $\$ 466$ million, compared to net related charges of $\$ 679$ million in 2015. Both periods' results were driven by the impact of derivative activity on the amortization of DAC and other costs and certain policyholder reserves. Results for 2016 were partially offset by a benefit of $\$ 515$ million from the implementation of a new ALM strategy in the Individual Annuities segment discussed above. For additional information, see Note 22 to the Consolidated Financial Statements.

The following tables set forth, for the periods indicated, the composition of OTTI recorded in earnings attributable to PFI excluding the Closed Block division by asset type and for fixed maturity securities by reason:

|  | Year End | mber |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  |  |  |
| Public fixed maturity securities | \$ 56 | \$ 31 |
| Private fixed maturity securities | 88 | 66 |
| Total fixed maturity securities | 144 | 97 |
| Equity securities | 61 | 111 |
| Other invested assets(1) | 57 | 121 |
| Total(2) | \$262 | \$329 |

(1) Includes OTTI related to investments in joint ventures and limited partnerships.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

|  | Year Ended December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Due to credit events or adverse conditions of the respective issuers(1) | \$111 | \$82 |
| Due to other accounting guidelines(2) | 33 | 15 |
| Total fixed maturity securities(3) | \$144 | \$97 |

(1) Represents circumstances where we believe credit events or other adverse conditions of the respective issuers have caused or will lead to a deficiency in the contractual cash flows related to the investment. The amount of the impairment recorded in earnings is the difference between the amortized cost of the debt security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment.
(2) Primarily represents circumstances where securities are being actively marketed for sale by the company and where securities with losses from foreign currency exchange rate movements approach maturity.
(3) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

Fixed maturity security OTTI in 2016 were concentrated in the energy, capital goods and transportation sectors within corporate securities. Fixed maturity security OTTI in 2015 were concentrated in the industrial other, consumer cyclical and energy sectors within corporate securities. In both periods, these OTTI were primarily related to securities with liquidity concerns, downgrades in credit, bankruptcy or other adverse financial conditions of the respective issuers.

Equity security OTTI in both 2016 and 2015 were primarily due to the extent and duration of declines in values.
Other invested assets OTTI in 2016 and 2015 were primarily due to the extent and duration of declines in values of investments in private equity limited partnerships.

## Closed Block Division

The following table sets forth net realized gains (losses) on fixed maturity securities, as of the dates indicated:

|  | Year Ended December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Gross realized investment gains: |  |  |
| Gross gains on sales and maturities(1) | \$ 204 | \$ 306 |
| Gross realized investment losses: |  |  |
| Net OTTI recognized in earnings(2) | (78) | (44) |
| Gross losses on sales and maturities(3) | (73) | (57) |
| Credit-related losses on sales | (4) | (2) |
| Total gross realized investment losses | (155) | (103) |
| Realized investment gains (losses), net-Fixed Maturity Securities | \$ 49 | \$ 203 |
| Net gains (losses) on sales and maturities-Fixed Maturity Securities(1) | \$ 131 | \$ 249 |

(1) During 2016, fixed maturity prepayment fees and call premiums were reclassified to "Net investment income." Prior periods were not restated. The impact of this change was immaterial.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.
(3) Excludes OTTI and credit-related losses through sales of investments due to expected near-term credit conditions of an underlying issuer.

Net realized gains on equity securities were $\$ 249$ million and $\$ 447$ million for the years ended December 31, 2016 and 2015, respectively, resulting from net gains on sales partially offset by OTTI of $\$ 13$ million and $\$ 15$ million, respectively. See below for additional information regarding the OTTI of equity securities in 2016 and 2015.

Net realized gains on derivatives were $\$ 162$ million and $\$ 195$ million for the years ended December 31, 2016 and 2015, respectively. The net derivative gains in 2016 primarily reflect $\$ 132$ million of gains on currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies and $\$ 30$ million of gains on interest rate derivatives used to manage duration as interest rates increased. The net gains in 2015 primarily reflect $\$ 193$ million on currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies.

The following tables set forth, for the periods indicated, the composition of OTTI recorded in earnings attributable to the Closed Block division by asset type and for fixed maturity securities by reason:

|  | Year End | mber |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  |  |  |
| Public fixed maturity securities | \$ 22 | \$ 9 |
| Private fixed maturity securities | 56 | 35 |
| Total fixed maturity securities | 78 | 44 |
| Equity securities | 13 | 15 |
| Other invested assets(1) | 30 | 21 |
| Total(2) | \$121 | \$80 |

(1) Includes OTTI related to investments in joint ventures and limited partnerships.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

|  | Year En | mber |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  |  |  |
| Due to credit events or adverse conditions of the respective issuers(1) | \$65 | \$41 |
| Due to other accounting guidelines(2) | 13 | 3 |
| Total fixed maturity securities(3) | \$78 | \$44 |

(1) Represents circumstances where we believe credit events or other adverse conditions of the respective issuers have caused or will lead to a deficiency in the contractual cash flows related to the investment. The amount of the impairment recorded in earnings is the difference between the amortized cost of the debt security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment.
(2) Primarily represents circumstances where securities are being actively marketed for sale by the company and where securities with losses from foreign currency exchange rate movements approach maturity.
(3) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

Fixed maturity security OTTI in 2016 were concentrated in the energy, transportation and industrial other sectors within corporate securities. Fixed maturity security OTTI in 2015 were concentrated in foreign government securities and the industrial other and consumer cyclical sectors within corporate securities. In both periods these OTTI were primarily related to securities with liquidity concerns, downgrades in credit, bankruptcy or other adverse financial conditions of the respective issuers.

Equity security OTTI in both 2016 and 2015 were primarily due to the extent and duration of declines in values.
Other invested assets OTTI in 2016 and 2015 were primarily due to the extent and duration of declines in values of investments in private equity limited partnerships.

## 2015 to 2014 Annual Comparison

## PFI excluding Closed Block Division

The following table sets forth net realized gains (losses) on fixed maturity securities as of dates indicated:

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2015 | 2014 |  |
|  | (in millions) |  |  |
| Gross realized investment gains: |  |  |  |
| Gross gains on sales and maturities(1) | \$1,809 |  | 1,154 |
| Gross realized investment losses: |  |  |  |
| Net OTTI recognized in earnings(2) | (97) |  | (36) |
| Gross losses on sales and maturities(3) | (273) |  | (327) |
| Credit-related losses on sales | (8) |  | (38) |
| Total gross realized investment losses | (378) |  | (401) |
| Realized investment gains (losses), net-Fixed Maturity Securities | $\stackrel{\text { \$1,431 }}{ }$ |  |  |
| Net gains (losses) on sales and maturities-Fixed Maturity Securities(1) | \$1,536 |  | 827 |

(1) Amounts include fixed maturity prepayment fees and call premiums.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.
(3) Excludes OTTI and credit-related losses through sales of investments due to expected near-term credit conditions of an underlying issuer.

Net gains on sales and maturities of fixed maturity securities were $\$ 1,536$ million in 2015 primarily due to net gains of $\$ 511$ million on sales and maturities of U.S. dollar-denominated securities within our International Insurance segment, and gains of $\$ 852$ million associated with foreign exchange remeasurement on assets that were transferred under the new structure in Gibraltar Life. These gains were partially offset by OTTI of $\$ 97$ million. Net gains on sales and maturities of fixed maturity securities of $\$ 827$ million in 2014 were primarily due to sales and maturities of U.S. dollar-denominated securities within our International Insurance segment. These gains were partially offset by OTTI of $\$ 36$ million. See below for additional information regarding the OTTI of fixed maturity securities in 2015 and 2014.

Net realized gains on equity securities were $\$ 4$ million and $\$ 81$ million for the years ended December 31, 2015 and 2014, respectively, primarily driven by gains on sales within our International Insurance segment. These gains were partially offset by OTTI of $\$ 111$ million and $\$ 26$ million for the years ended December 31, 2015 and 2014, respectively. See below for additional information regarding the OTTI of equity securities in 2015 and 2014.

Net realized gains on commercial mortgage and other loans for the year ended December 31, 2015 were $\$ 36$ million, primarily driven by servicing revenue of $\$ 31$ million in our Asset Management business and a net decrease in the allowance for losses of $\$ 5$ million. Net realized gains on commercial mortgage and other loans were $\$ 79$ million for the year ended December 31, 2014 and were primarily driven by a net decrease in the allowance for losses of $\$ 65$ million, including the impact of assumption updates. For additional information regarding our allowance for losses, see "-General Account Investments-Commercial Mortgage and Other Loans-Commercial Mortgage and Other Loan Quality" below.

Net realized gains on derivatives were $\$ 1,775$ million in 2015, compared to net realized losses of $\$ 445$ million in 2014. The net gains in 2015 primarily reflect $\$ 995$ million of gains on product-related embedded derivatives and related hedge positions mainly associated with certain variable annuity contracts, $\$ 326$ million of gains on interest rate derivatives used to manage duration as interest rates decreased, $\$ 345$ million of gains on foreign currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies and $\$ 159$ million of gains primarily representing fees earned on fee-based GICs which are accounted for as derivatives. The net derivative losses in 2014 primarily reflect net losses of $\$ 2,627$ million on product-related embedded derivatives and related hedge positions mainly associated with certain variable annuity contracts. Also contributing were net losses of $\$ 500$ million on foreign-currency derivatives used to hedge portfolio assets in our Japan business, primarily due to the weakening of the Japanese yen against the U.S. dollar and other currencies. These losses were partially offset by gains of $\$ 1,502$ million on interest rate derivatives used to manage duration as long-term interest rates decreased, $\$ 869$ million of gains on other foreign-currency derivatives primarily associated with hedges of portfolio assets in our U.S. business and hedges of future income of non-U.S. businesses (predominantly in Japan) as the U.S. dollar strengthened against various currencies and $\$ 166$ million of gains of fees earned on fee-based GICs.

Net realized losses within other investments were $\$ 54$ million in 2015 primarily driven by OTTI of $\$ 121$ million on investments in limited partnerships, partially offset by gains of $\$ 40$ million on sales of real estate. Net realized gains on other investments were $\$ 7$ million in 2014 and included net gains of $\$ 28$ million, primarily from our Asset Management and International Insurance segments, partially offset by OTTI of $\$ 21$ million on real estate and joint ventures and limited partnership investments. See below for additional information regarding the OTTI of other invested assets in 2015 and 2014.

Related adjustments for 2015 included net negative related adjustments of $\$ 934$ million primarily driven by settlements on interest rate and currency derivatives. Results for 2014 included net negative related adjustments of $\$ 4,063$ million primarily driven by the impact of foreign-currency exchange rate movements on certain non-yen denominated assets and liabilities within our Japan insurance operations and by settlements on interest rate and currency derivatives. We implemented a structure in Gibraltar Life, effective for financial reporting beginning in the first quarter of 2015, which has minimized volatility in reported U.S. GAAP earnings arising from foreign currency remeasurement. For additional information, see "-Results of Operations-Impact of Foreign Currency Exchange Rates" above.

Related charges for 2015 and 2014 included net related charges of $\$ 679$ million and $\$ 542$ million, respectively. Both periods' results were driven by the impact of derivative activity on the amortization of DAC and other costs and certain policyholder reserves.

The following tables set forth, for the periods indicated, the composition of OTTI recorded in earnings attributable to the PFI excluding the Closed Block division by asset type and for fixed maturity securities by reason:

|  | Year End | mber 3 |
| :---: | :---: | :---: |
|  | 2015 | 2014 |
|  |  |  |
| Public fixed maturity securities | \$ 31 | \$22 |
| Private fixed maturity securities | 66 | 14 |
| Total fixed maturity securities | 97 | 36 |
| Equity securities | 111 | 26 |
| Other invested assets(1) | 121 | 21 |
| Total(2) | \$329 | \$83 |

(1) Includes OTTI related to investments in joint ventures and limited partnerships and real estate investments.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

| Year Ended December 31, |  |
| :---: | :---: |
| 2015 |  |
| (in millions) |  |
| $\$ 82$ | $\$ 24$ |
| $\underline{15}$ | $\underline{12}$ |
| $\underline{\$ 97}$ | $\underline{\$ 36}$ |

(1) Represents circumstances where we believe credit events or other adverse conditions of the respective issuers have caused or will lead to a deficiency in the contractual cash flows related to the investment. The amount of the impairment recorded in earnings is the difference between the amortized cost of the debt security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment.
(2) Primarily represents circumstances where securities with losses from foreign currency exchange rate movements approach maturity.
(3) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

Fixed maturity security OTTI in 2015 were concentrated in the industrial other, consumer cyclical and energy sectors within corporate securities. Fixed maturity security OTTI in 2014 were concentrated in the utility, consumer cyclical and finance sectors within corporate securities. In both periods, these OTTI were primarily related to securities with liquidity concerns, downgrades in credit, bankruptcy or other adverse financial conditions of the respective issuers.

Equity security OTTI in both 2015 and 2014 were primarily due to the extent and duration of declines in values.
Other invested assets OTTI in 2015 were primarily driven by the extent and duration of declines in values of investments in limited partnerships within the energy, finance and utility sectors. Other invested assets OTTI in 2014 were primarily driven by the extent and duration of declines in values of investments in limited partnerships.

## Closed Block Division

The following table sets forth net realized gains (losses) on fixed maturity securities, as of the dates indicated:

|  | Year Ended December 31, |  |
| :---: | :---: | :---: |
|  | 2015 | 2014 |
|  | (in millions) |  |
| Gross realized investment gains: |  |  |
| Gross gains on sales and maturities(1) | \$ 306 | \$510 |
| Gross realized investment losses: |  |  |
| Net OTTI recognized in earnings(2) | (44) | (20) |
| Gross losses on sales and maturities(3) | (57) | (37) |
| Credit-related losses on sales | (2) | (12) |
| Total gross realized investment losses | (103) | (69) |
| Realized investment gains (losses), net-Fixed Maturity Securities | \$ 203 | \$441 |
| Net gains (losses) on sales and maturities-Fixed Maturity Securities(1) | \$249 | $\stackrel{\$ 473}{\underline{-}}$ |

(1) Amounts include fixed maturity prepayment fees and call premiums.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.
(3) Excludes OTTI and credit related losses through sales of investments due to expected near-term credit conditions of an underlying issuer.

Net realized gains on equity securities were $\$ 447$ million and $\$ 431$ million for the years ended December 31, 2015 and 2014, respectively, resulting from net gains on sales of equity securities of $\$ 462$ million and $\$ 437$ million, respectively, partially offset by OTTI of $\$ 15$ million and \$6 million, respectively. See below for additional information regarding the OTTI of equity securities in 2015 and 2014.

Net realized gains on commercial mortgage and other loans were $\$ 1$ million and $\$ 31$ million for the years ended December 31, 2015 and 2014, respectively. Net realized gains on commercial mortgage and other loans of $\$ 31$ million for the year ended December 31, 2014 were primarily driven by a net decrease in the allowance for losses of $\$ 32$ million, including the impact of assumption updates. For additional information regarding our allowance for losses, see "-General Account Investments-Commercial Mortgage and Other Loans-Commercial Mortgage and Other Loan Quality" below.

Net realized gains on derivatives were $\$ 195$ million and $\$ 263$ million in 2015 and 2014, respectively. The net gains in 2015 primarily reflect $\$ 193$ million on currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against various currencies. Derivative gains in 2014 primarily reflect net gains of $\$ 182$ million on currency derivatives used to hedge foreign denominated investments as the U.S. dollar strengthened against the euro, net gains of $\$ 72$ million on interest rate derivatives primarily used to manage duration as long-term interest rates decreased and net gains of $\$ 45$ million on "to be announced" ("TBA") forward contracts as interest rates declined. These gains were partially offset by losses of $\$ 41$ million on terminated capital cash flow hedges due to debt extinguishment.

The following tables set forth, for the periods indicated, the composition of OTTI recorded in earnings attributable to the Closed Block division by asset type and for fixed maturity securities by reason:

|  | Year End | mber 3 |
| :---: | :---: | :---: |
|  | 2015 | 2014 |
|  |  |  |
| Public fixed maturity securities | \$ 9 | \$13 |
| Private fixed maturity securities | 35 | 7 |
| Total fixed maturity securities | 44 | 20 |
| Equity securities | 15 | 6 |
| Other invested assets(1) | 21 | 5 |
| Total(2) | \$80 | \$31 |

(1) Includes OTTI related to investments in joint ventures and limited partnerships.
(2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

|  | Year En | mber 3 |
| :---: | :---: | :---: |
|  | 2015 | 2014 |
|  |  |  |
| Due to credit events or adverse conditions of the respective issuers(1) | \$41 | \$19 |
| Due to other accounting guidelines(2) | 3 | 1 |
| Total fixed maturity securities(3) | \$44 | \$20 |

(1) Represents circumstances where we believe credit events or other adverse conditions of the respective issuers have caused or will lead to a deficiency in the contractual cash flows related to the investment. The amount of the impairment recorded in earnings is the difference between the amortized cost of the debt security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment.
(2) Primarily represents circumstances where securities with losses from foreign currency exchange rate movements approach maturity.
(3) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

Fixed maturity security OTTI in 2015 were concentrated in foreign government securities and the industrial other and consumer cyclical sectors within corporate securities. Fixed maturity security OTTI in 2014 were concentrated in foreign government securities, asset-backed securities collateralized by sub-prime mortgages and the consumer cyclical sector within corporate securities. In both periods, these OTTI primarily reflect adverse financial conditions of the respective issuers.

Equity security OTTI in 2015 and 2014 were primarily due to the extent and duration of declines in values.
Other invested assets OTTI in 2015 were primarily driven by the extent and duration of declines in values of investments in limited partnerships within the energy, finance and utility sectors. Other invested assets OTTI in 2014 were primarily driven by the extent and duration of declines in values of investments in limited partnerships.

## General Account Investments

We maintain diversified investment portfolios in our general account to support our liabilities to customers as well as our other general liabilities. Our general account does not include: (1) assets of our derivative operations; (2) assets of our asset management operations, including assets managed for third parties; and (3) those assets classified as "Separate account assets" on our balance sheet.

The general account portfolios are managed pursuant to the distinct objectives and investment policy statements of PFI excluding the Closed Block division and the Closed Block division. The primary investment objectives of PFI excluding the Closed Block division include:

- hedging and otherwise managing the market risk characteristics of the major product liabilities and other obligations of the Company;
- optimizing investment income yield within risk constraints over time; and
- for certain portfolios, optimizing total return, including both investment income yield and capital appreciation, within risk constraints over time, while managing the market risk exposures associated with the corresponding product liabilities.

We pursue our objective to optimize investment income yield for PFI excluding the Closed Block division over time through:

- the investment of net operating cash flows, including new product premium inflows, and proceeds from investment sales, repayments and prepayments into investments with attractive risk-adjusted yields; and
- the sale of lower-yielding investments, where appropriate, either to meet various cash flow needs or to manage the portfolio's risk exposure profile with respect to duration, credit, currency and other risk factors, while considering the impact on taxes and capital.

The primary investment objectives of the Closed Block division include:

- providing for the reasonable dividend expectations of the participating policyholders within the Closed Block division; and
- optimizing total return, including both investment income yield and capital appreciation, within risk constraints, while managing the market risk exposures associated with the major products in the Closed Block division.

Our portfolio management approach, while emphasizing our investment income yield and asset/liability risk management objectives, also takes into account the capital and tax implications of portfolio activity, our assertions regarding our ability and intent to hold debt and equity securities to recovery. For a further discussion of our policies regarding other-than-temporary impairments, including our assertions regarding our ability and intent to hold equity securities to recovery and any intention or requirement to sell debt securities before anticipated recovery, see "-Fixed Maturity Securities-OTTI of Fixed Maturity Securities" and "-Equity Securities-OTTI of Equity Securities" below.

## Management of Investments

The Investment Committee of our Board of Directors oversees our proprietary investments, including our general account portfolios, and regularly reviews performance and risk positions. Our Chief Investment Officer Organization ("CIO Organization") develops investment policies subject to risk limits proposed by our Enterprise Risk Management group for the general account portfolios of our domestic and international insurance subsidiaries and directs and oversees management of the general account portfolios within risk limits and exposure ranges approved annually by the Investment Committee.

The CIO Organization, including related functions within our insurance subsidiaries, works closely with product actuaries and Enterprise Risk Management to understand the characteristics of our products and their associated market risk exposures. This information is incorporated into the development of target asset portfolios that manage market risk exposures associated with the liability characteristics and establish investment risk exposures, within tolerances prescribed by Prudential's investment risk limits, on which we expect to earn an attractive risk-adjusted return. We develop asset strategies for specific classes of product liabilities and attributed or accumulated surplus, each with distinct risk characteristics. Market risk exposures associated with the liabilities include interest rate risk, which is addressed through the duration characteristics of the target asset mix, and currency risk, which is addressed by the currency profile of the target asset mix. In certain of our smaller markets outside of the U.S. and Japan, capital markets limitations hinder our ability to hedge interest rate exposure to the same extent we do for our U.S. and Japan businesses and lead us to accept a higher degree of interest rate risk in these smaller portfolios. General account portfolios typically include allocations to credit and other investment risks as a means to enhance investment yields and returns over time.

Most of our products can be categorized into the following three classes:

- interest-crediting products for which the rates credited to customers are periodically adjusted to reflect market and competitive forces and actual investment experience, such as fixed annuities and universal life insurance;
- participating individual and experience-rated group products in which customers participate in actual investment and business results through annual dividends, interest or return of premium; and
- products with fixed or guaranteed terms, such as traditional whole life and endowment products, guaranteed investment contracts, funding agreements and payout annuities.

Our total investment portfolio is composed of a number of operating portfolios. Each operating portfolio backs a specific set of liabilities, and the portfolios have a target asset mix that supports the liability characteristics, including duration, cash flow, liquidity needs and other criteria. As of December 31, 2016, the average duration of our domestic general account investment portfolios attributable to PFI excluding the Closed Block division, including the impact of derivatives, is between 7 and 8 years. As of December 31, 2016, the average duration of our international general account portfolios attributable to our Japanese insurance operations, including the impact of derivatives, is between 11 and 12 years and represents a blend of yen-denominated and U.S. dollar and Australian dollar-denominated investments, which have distinct average durations supporting the insurance liabilities we have issued in those currencies. Our asset/ liability management process has enabled us to manage our portfolios through several market cycles.

We implement our portfolio strategies primarily through investment in a broad range of fixed income assets, including government and agency securities, public and private corporate bonds and structured securities and commercial mortgage loans. In addition, we hold allocations of non-coupon investments, which include equity securities and other long-term investments such as joint ventures and limited partnerships, real estate held through direct ownership and seed money investments in separate accounts.

We manage our public fixed maturity portfolio to a risk profile directed or overseen by the CIO Organization and Enterprise Risk Management groups and to a profile that also reflects the market environments impacting both our domestic and international insurance portfolios. The return that we earn on the portfolio will be reflected in investment income and in realized gains or losses on investments.

We use privately-placed corporate debt securities and commercial mortgage loans, which consist of mortgages on diversified properties in terms of geography, property type and borrowers, to enhance the yield on our portfolio and to improve the overall diversification of the portfolios. Private placements typically offer enhanced yields due to an illiquidity premium and generally offer enhanced credit protection in the form of covenants. Our origination capability offers the opportunity to lead transactions and gives us the opportunity for better terms, including covenants and call protection, and to take advantage of innovative deal structures.

Derivative strategies are employed in the context of our risk management framework to enhance our ability to manage interest rate and currency risk exposures of the asset portfolio relative to the liabilities and to manage credit and equity positions in the investment portfolios. For a discussion of our risk management process, see "Quantitative and Qualitative Disclosures About Market Risk" below.

Our portfolio asset allocation reflects our emphasis on diversification across asset classes, sectors and issuers. The CIO Organization, directly and through related functions within the insurance subsidiaries, implements portfolio strategies primarily through various asset
management units within Prudential's Asset Management segment. Activities of the Asset Management segment on behalf of the general account portfolios are directed and overseen by the CIO Organization and monitored by Enterprise Risk Management for compliance with investment risk limits.

## Portfolio Composition

Our investment portfolio consists of public and private fixed maturity securities, commercial mortgage and other loans, policy loans and non-coupon investments as defined above. The composition of our general account reflects, within the discipline provided by our risk management approach, our need for competitive results and the selection of diverse investment alternatives available primarily through our Asset Management segment. The size of our portfolio enables us to invest in asset classes that may be unavailable to the typical investor.

The following tables set forth the composition of the investments of our general account apportioned between PFI excluding the Closed Block division and the Closed Block division as of the dates indicated:

|  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | PFI Excluding Closed Block Division |  | Closed Block Division | Total |
|  | (\$ in millions) |  |  |  |
| Fixed maturities: |  |  |  |  |
| Public, available-for-sale, at fair value | \$243,201 | 64.2\% | \$24,917 | \$268,118 |
| Public, held-to-maturity, at amortized cost | 1,772 | 0.5 | 0 | 1,772 |
| Private, available-for-sale, at fair value | 39,074 | 10.3 | 13,987 | 53,061 |
| Private, held-to-maturity, at amortized cost | 372 | 0.1 | 0 | 372 |
| Trading account assets supporting insurance liabilities, at fair value | 21,840 | 5.8 | 0 | 21,840 |
| Other trading account assets, at fair value | 1,521 | 0.4 | 284 | 1,805 |
| Equity securities, available-for-sale, at fair value | 7,163 | 1.9 | 2,572 | 9,735 |
| Commercial mortgage and other loans, at book value | 42,771 | 11.2 | 9,437 | 52,208 |
| Policy loans, at outstanding balance | 7,095 | 1.9 | 4,660 | 11,755 |
| Other long-term investments(1) | 7,231 | 1.9 | 3,020 | 10,251 |
| Short-term investments | 6,657 | 1.8 | 837 | 7,494 |
| Total general account investments | 378,697 | 100.0\% | 59,714 | 438,411 |
| Invested assets of other entities and operations(2) | 5,829 |  | 0 | 5,829 |
| Total investments | \$384,526 |  | \$59,714 | \$444,240 |
|  | December 31, 2015 |  |  |  |


|  | PFI Exc Closed Divis | ding <br> lock <br> n | Closed Block Division | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | millions) |  |
| Fixed maturities: |  |  |  |  |
| Public, available-for-sale, at fair value | \$216,628 | 63.1\% | \$23,505 | \$240,133 |
| Public, held-to-maturity, at amortized cost | 1,834 | 0.5 | 0 | 1,834 |
| Private, available-for-sale, at fair value | 35,767 | 10.4 | 14,290 | 50,057 |
| Private, held-to-maturity, at amortized cost | 474 | 0.1 | 0 | 474 |
| Trading account assets supporting insurance liabilities, at fair value | 20,522 | 6.0 | 0 | 20,522 |
| Other trading account assets, at fair value | 1,561 | 0.5 | 288 | 1,849 |
| Equity securities, available-for-sale, at fair value | 6,537 | 1.9 | 2,726 | 9,263 |
| Commercial mortgage and other loans, at book value | 40,486 | 11.8 | 9,771 | 50,257 |
| Policy loans, at outstanding balance | 6,867 | 2.0 | 4,790 | 11,657 |
| Other long-term investments(1) | 6,549 | 1.9 | 2,921 | 9,470 |
| Short-term investments | 6,250 | 1.8 | 1,467 | 7,717 |
| Total general account investments | 343,475 | $\underline{ }$ | 59,758 | 403,233 |
| Invested assets of other entities and operations(2) | 13,959 |  | 0 | 13,959 |
| Total investments | \$357,434 |  | \$59,758 | \$417,192 |

(1) Other long-term investments consist of real estate and non-real estate-related investments in joint ventures and limited partnerships, investment real estate held through direct ownership and other miscellaneous investments. For additional information regarding these investments, see "-Other LongTerm Investments" below.
(2) Includes invested assets of our asset management and derivative operations. Excludes assets of our asset management operations that are managed for third- parties and those assets classified as "Separate account assets" on our balance sheet. For additional information regarding these investments, see "-Invested Assets of Other Entities and Operations" below.

The increase in general account investments attributable to PFI excluding the Closed Block division in 2016 was primarily due to the reinvestment of net investment income and net business inflows, the translation impact of the yen strengthening against the U.S. dollar, credit spread tightening and a decrease in interest rates in Japan. The general account investments attributable to the Closed Block division
in 2016 remained relatively flat compared to 2015. For information regarding the methodology used in determining the fair value of our fixed maturities, see Note 20 to the Consolidated Financial Statements.

As of December 31, 2016 and 2015, $42 \%$ and $41 \%$, respectively, of our general account investments attributable to PFI excluding the Closed Block division related to our Japanese insurance operations.

The following table sets forth the composition related to the investments of our Japanese insurance operations' general account as of the dates indicated:

|  | December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Fixed maturities: |  |  |
| Public, available-for-sale, at fair value | \$123,285 | \$109,257 |
| Public, held-to-maturity, at amortized cost | 1,772 | 1,834 |
| Private, available-for-sale, at fair value | 11,646 | 9,747 |
| Private, held-to-maturity, at amortized cost | 372 | 474 |
| Trading account assets supporting insurance liabilities, at fair value | 2,166 | 2,020 |
| Other trading account assets, at fair value | 434 | 647 |
| Equity securities, available-for-sale, at fair value | 2,654 | 2,660 |
| Commercial mortgage and other loans, at book value | 11,700 | 9,756 |
| Policy loans, at outstanding balance | 2,369 | 2,208 |
| Other long-term investments(1) | 1,186 | 1,742 |
| Short-term investments | 398 | 417 |
| Total Japanese general account investments | \$157,982 | \$140,762 |

(1) Other long-term investments consist of real estate and non-real estate-related investments in joint ventures and limited partnerships, investment real estate held through direct ownership, derivatives and other miscellaneous investments.

The increase in general account investments related to our Japanese insurance operations in 2016 was primarily attributable to the reinvestment of net investment income and net business inflows, the translation impact of the yen strengthening against the U.S. dollar and a decrease in interest rates in Japan.

As of December 31, 2016, our Japanese insurance operations had $\$ 55.7$ billion, at carrying value, of investments denominated in U.S. dollars, including $\$ 5.3$ billion that were hedged to yen through third-party derivative contracts and $\$ 36.1$ billion that support liabilities denominated in U.S. dollars, with the remainder hedging our foreign currency exchange rate exposure on U.S. dollar-equivalent equity. As of December 31, 2015, our Japanese insurance operations had $\$ 50.2$ billion, at carrying value, of investments denominated in U.S. dollars, including $\$ 4.0$ billion that were hedged to yen through third-party derivative contracts and $\$ 32.3$ billion that support liabilities denominated in U.S. dollars, with the remainder hedging our foreign currency exchange rate exposure on U.S. dollar-equivalent equity. The $\$ 5.5$ billion increase in the carrying value of U.S. dollar-denominated investments from December 31, 2015 is primarily attributable to portfolio growth as a result of net business inflows and the reinvestment of net investment income offset by a net increase in fair value driven by the decrease in interest rates.

Our Japanese insurance operations had $\$ 11.0$ billion and $\$ 10.0$ billion, at carrying value, of investments denominated in Australian dollars that support liabilities denominated in Australian dollars as of December 31, 2016 and 2015, respectively. The $\$ 1.0$ billion increase in the carrying value of Australian dollar-denominated investments from December 31, 2015 is primarily attributable to portfolio growth as a result of net business inflows and the reinvestment of net investment income.

For additional information regarding U.S. and Australian dollar investments held in our Japanese insurance operations and a discussion of our yen hedging strategy, see "-Results of Operations by Segment-International Insurance Division," above.

## Investment Results

The following tables set forth the income yield and investment income for each major investment category of our general account for the periods indicated. The yields are based on net investment income as reported under U.S. GAAP and as such do not include certain interest related items, such as settlements of duration management swaps which are included in realized gains (losses). Effective

January 1, 2016, the Company classified fixed maturity prepayment fees and call premiums in "Net investment income" rather than "Realized investment gains (losses), net." The impact of this change to prior periods was immaterial.

Year Ended December 31, 2016

|  | Year Ended December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFI Excluding Closed Block Division |  | Closed Block Division |  | Combined |  |
|  | Yield(1) | Amount | Yield(1) | Amount | Yield(1) | Amount |
|  |  |  | (\$ in m | llions) |  |  |
| Fixed maturities | 3.95\% | \$ 9,515 | 4.98\% | \$1,696 | 4.07\% | \$11,211 |
| Trading account assets supporting insurance liabilities | 3.59 | 758 | 0.00 | 0 | 3.59 | 758 |
| Equity securities | 5.97 | 307 | 3.43 | 59 | 5.33 | 366 |
| Commercial mortgage and other loans | 4.32 | 1,751 | 5.06 | 476 | 4.46 | 2,227 |
| Policy loans | 5.00 | 347 | 6.10 | 280 | 5.44 | 627 |
| Short-term investments and cash equivalents | 0.68 | 122 | 2.23 | 20 | 0.73 | 142 |
| Other investments | 5.67 | 473 | 6.40 | 203 | 5.87 | 676 |
| Gross investment income before investment expenses | 3.90 | 13,273 | 5.10 | 2,734 | 4.07 | 16,007 |
| Investment expenses | (0.13) | (413) | (0.26) | (156) | (0.15) | (569) |
| Investment income after investment expenses . | 3.77\% | 12,860 | 4.84\% | 2,578 | 3.92\% | 15,438 |
| Investment results of other entities and operations(2) |  | 82 |  | 0 |  | 82 |
| Total investment income |  | \$12,942 |  | \$2,578 |  | \$15,520 |

Year Ended December 31, 2015

|  | PFI Excluding Closed Block Division |  | Closed Block Division |  | Combined |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Yield(1) }}$ | Amount | Yield(1) | Amount | Yield(1) | Amount |
|  | (\$ in millions) |  |  |  |  |  |
| Fixed maturities | 4.03\% | \$ 8,876 | 4.94\% | \$1,692 | 4.15\% | \$10,568 |
| Trading account assets supporting insurance liabilities | 3.59 | 720 | 0.00 | 0 | 3.59 | 720 |
| Equity securities | 5.67 | 266 | 3.49 | 70 | 5.01 | 336 |
| Commercial mortgage and other loans | 4.58 | 1,728 | 5.42 | 512 | 4.75 | 2,240 |
| Policy loans | 5.01 | 334 | 6.06 | 285 | 5.45 | 619 |
| Short-term investments and cash equivalents | 0.25 | 43 | 1.14 | 12 | 0.28 | 55 |
| Other investments | 5.91 | 489 | 7.24 | 222 | 6.27 | 711 |
| Gross investment income before investment expenses | 3.97 | 12,456 | 5.14 | 2,793 | 4.14 | 15,249 |
| Investment expenses | (0.14) | (394) | (0.25) | (140) | (0.16) | (534) |
| Investment income after investment expenses | 3.83\% | 12,062 | 4.89\% | 2,653 | 3.98\% | 14,715 |
| Investment results of other entities and operations(2) |  | 114 |  | 0 |  | 114 |
| Total investment income |  | \$12,176 |  | \$2,653 |  | \$14,829 |

Year Ended December 31, 2014

|  | PFI Excluding Closed Block Division |  | Closed Block Division |  | Combined |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yield(1) | Amount | Yield(1) | Amount | Yield(1) | Amount |
|  | (\$ in millions) |  |  |  |  |  |
| Fixed maturities | 3.90\% | \$ 8,762 | 5.18\% | \$1,917 | 4.08\% | \$10,679 |
| Trading account assets supporting insurance liabilities | 3.75 | 765 | 0.00 | 0 | 3.75 | 765 |
| Equity securities | 5.97 | 275 | 3.40 | 79 | 5.11 | 354 |
| Commercial mortgage and other loans | 4.80 | 1,565 | 5.45 | 524 | 4.95 | 2,089 |
| Policy loans | 5.08 | 341 | 6.07 | 292 | 5.49 | 633 |
| Short-term investments and cash equivalents | 0.21 | 26 | 1.03 | 8 | 0.25 | 34 |
| Other investments | 9.10 | 753 | 13.35 | 342 | 10.11 | 1,095 |
| Gross investment income before investment expenses | 4.04 | 12,487 | 5.54 | 3,162 | 4.28 | 15,649 |
| Investment expenses | (0.14) | (362) | (0.27) | (155) | (0.16) | (517) |
| Investment income after investment expenses | 3.90\% | 12,125 | 5.27\% | 3,007 | 4.12\% | 15,132 |
| Investment results of other entities and operations(2) |  | 124 |  | 0 |  | 124 |
| Total investment income |  | \$12,249 |  | \$3,007 |  | \$15,256 |

[^3]See below for a discussion of the change in the yields for PFI excluding the Closed Block division. The decrease in net investment income yield attributable to the Closed Block division for 2016 compared to 2015 was primarily due to lower fixed income reinvestment rates and lower yields from non-coupon investments partially offset by higher fixed maturity prepayment fees and call premiums.

The net investment income yield attributable to the Closed Block division for 2015 decreased compared to 2014, due to lower yields on non-coupon investments and lower fixed income reinvestment rates.

The following table sets forth the income yield and investment income for each major investment category of our general account investments, excluding both the Closed Block division and the Japanese insurance operations' portion of the general account which is presented separately below, for the periods indicated. The yields are based on net investment income as reported under U.S. GAAP and as such do not include certain interest related items, such as settlements of duration management swaps which are included in realized gains (losses).

|  | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
|  | $\underline{\text { Yield(1) }}$ | Amount | (\$ in millions) |  |  |  |
| Fixed maturities | 4.63\% | \$6,043 | 4.67\% | \$5,686 | 4.69\% | \$5,461 |
| Trading account assets supporting insurance liabilities | 3.80 | 721 | 3.79 | 688 | 3.96 | 730 |
| Equity securities | 6.49 | 232 | 6.07 | 197 | 6.49 | 191 |
| Commercial mortgage and other loans | 4.35 | 1,306 | 4.62 | 1,338 | 4.96 | 1,271 |
| Policy loans | 5.49 | 252 | 5.52 | 250 | 5.66 | 253 |
| Short-term investments and cash equivalents | 0.67 | 113 | 0.25 | 38 | 0.21 | 22 |
| Other investments | 5.96 | 344 | 6.17 | 356 | 10.03 | 598 |
| Gross investment income before investment expenses | 4.31 | 9,011 | 4.33 | 8,553 | 4.63 | 8,526 |
| Investment expenses | (0.14) | (248) | $(0.15)$ | (239) | (0.15) | (209) |
| Investment income after investment expenses | 4.17\% | 8,763 | 4.18\% | 8,314 | 4.48\% | 8,317 |
| Investment results of other entities and operations(2) |  | 82 |  | 114 |  | 124 |
| Total investment income |  | \$8,845 |  | \$8,428 |  | \$8,441 |

(1) Yields are based on quarterly average carrying values except for fixed maturities, equity securities and securities lending activity. Yields for fixed maturities are based on amortized cost. Yields for equity securities are based on cost. Yields for fixed maturities and short-term investments and cash equivalents are calculated net of liabilities and rebate expenses corresponding to securities lending activity. Yields exclude investment income on assets other than those included in invested assets.
(2) Includes investment income of our asset management operations and derivative operations,.

The decrease in net investment income yield attributable to our general account investments, excluding both the Closed Block division and the Japanese operations' portfolio, for 2016, compared to 2015, was primarily the result of lower fixed income reinvestment rates and lower yields from non-coupon investments offset by higher fixed maturity prepayment fees and call premiums.

The decrease in net investment income yield attributable to our general account investments, excluding both the Closed Block division and the Japanese operations' portfolio, for 2015, compared to 2014, was primarily the result of lower income from non-coupon investments and lower fixed income reinvestment rates.

The following table sets forth the income yield and investment income for each major investment category of our Japanese insurance operations' general account for the periods indicated. The yields are based on net investment income as reported under U.S. GAAP and as such do not include certain interest related items, such as settlements of duration management swaps which are included in realized gains (losses).

|  | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
|  | Yield(1) | Amount | Yield(1) | Amount | Yield(1) | Amount |
|  | (\$ in millions) |  |  |  |  |  |
| Fixed maturities | 3.14\% | \$3,472 | 3.23\% | \$3,190 | 3.06\% | \$3,301 |
| Trading account assets supporting insurance liabilities | 1.75 | 37 | 1.66 | 32 | 1.80 | 35 |
| Equity securities | 4.80 | 75 | 4.77 | 69 | 5.06 | 84 |
| Commercial mortgage and other loans | 4.23 | 445 | 4.45 | 390 | 4.20 | 294 |
| Policy loans | 4.05 | 95 | 3.93 | 84 | 3.93 | 88 |
| Short-term investments and cash equivalents | 0.78 | 9 | 0.32 | 5 | 0.24 | 4 |
| Other investments | 5.01 | 129 | 5.32 | 133 | 6.67 | 155 |
| Gross investment income before investment expenses | 3.26 | 4,262 | 3.35 | 3,903 | 3.18 | 3,961 |
| Investment expenses | (0.12) | (165) | (0.13) | (155) | (0.12) | (153) |
| Total investment income | 3.14\% | \$4,097 | 3.22\% | \$3,748 | 3.06\% | \$3,808 |

(1) Yields are based on quarterly average carrying values except for fixed maturities, equity securities and securities lending activity. Yields for fixed maturities are based on amortized cost. Yields for equity securities are based on cost. Yields for fixed maturities and short-term investments and cash equivalents are calculated net of liabilities and rebate expenses corresponding to securities lending activity. Yields exclude investment income on assets other than those included in invested assets.

The decrease in net investment income yield on the Japanese insurance portfolio for 2016, compared to 2015, was primarily attributable to lower fixed income reinvestment rates and lower yields from non-coupon investments.

The increase in net investment income yield on the Japanese insurance portfolio for 2015, compared to 2014, was primarily attributable to a higher allocation into U.S. dollar-denominated investments.

Both the U.S. dollar-denominated and Australian dollar-denominated fixed maturities that are not hedged to yen through third-party derivative contracts provide a yield that is substantially higher than the yield on comparable yen-denominated fixed maturities. The average amortized cost of U.S. dollar-denominated fixed maturities that are not hedged to yen through third-party derivative contracts was approximately $\$ 37.7$ billion and $\$ 35.0$ billion, for the years ended December 31, 2016 and 2015, respectively. The majority of U.S. dollardenominated fixed maturities support liabilities that are denominated in U.S. dollars. The average amortized cost of Australian dollardenominated fixed maturities that are not hedged to yen through third-party derivative contracts was approximately $\$ 9.5$ billion and $\$ 9.3$ billion, for the years ended December 31, 2016 and 2015, respectively. The Australian dollar-denominated fixed maturities support liabilities that are denominated in Australian dollars.

For additional information regarding U.S. and Australian dollar investments held in our Japanese insurance operations see, "-Results of Operations by Segment-International Insurance Division."

## General Account Investments of PFI excluding Closed Block Division

In the following sections, we provide details about our investment portfolio, excluding investments held in the Closed Block division. We believe the details of the composition of our investment portfolio excluding the Closed Block division are most relevant to an understanding of our operations that are pertinent to investors in Prudential Financial because substantially all Closed Block division assets support obligations and liabilities relating to the Closed Block policies only. See Note 12 to the Consolidated Financial Statements for further information on the Closed Block.

## Energy Related Exposure

As of December 31, 2016, PFI excluding the Closed Block division had direct and indirect energy and related exposure with a market value of approximately $\$ 12.6$ billion and a net unrealized gain of approximately $\$ 0.5$ billion, which was reflected in AOCI. Of this exposure, $\$ 10.8$ billion represented investments in public and private corporate fixed maturity securities and was concentrated primarily in midstream ( $33 \%$ ), independent energy ( $29 \%$ ), integrated energy ( $18 \%$ ) and oil field services ( $14 \%$ ). As of December 31, 2016, the credit quality of energy sector fixed maturity securities was $83 \%$ investment grade. The remaining exposure of $\$ 1.8$ billion was comprised of trading account assets, equity securities and private equity investments. Energy investment realized losses were approximately $\$ 138$ million from OTTI and $\$ 193$ million from sales for the year ended December 31, 2016. Our investments in the energy sector could experience future valuation declines or impairments if energy prices decline from current levels for an extended period of time.

## United Kingdom / European Union Exposure

As of December 31, 2016, PFI excluding the Closed Block division had direct and indirect United Kingdom exposure with a market value of approximately $\$ 10.4$ billion. Net unrealized gains were approximately $\$ 0.4$ billion, which were reflected in AOCI. Of this exposure, $\$ 7.1$ billion represented public and private corporate fixed maturity securities across a range of sectors, $91 \%$ of which was investment grade. In addition, $\$ 1.2$ billion represented commercial mortgage loans with a weighted average loan-to-value ratio of $60 \%$ and a weighted average debt service coverage ratio of 2.55 times. The remaining United Kingdom exposure of $\$ 2.1$ billion was comprised of trading account assets, equity securities, private equity investments and real estate held through direct ownership. Of the total exposure, $42 \%$ was denominated in pound sterling, substantially all of which was hedged back to U.S. dollars.

As of December 31, 2016, PFI excluding the Closed Block division had direct and indirect European Union exposure excluding the United Kingdom with a market value of approximately $\$ 17.0$ billion. Net unrealized gains were approximately $\$ 0.8$ billion, which were reflected in AOCI. Of this exposure, $\$ 14.0$ billion represented public and private corporate fixed maturity securities, $96 \%$ of which was investment grade. The remaining European Union exposure excluding the United Kingdom of $\$ 3.0$ billion was comprised of trading account assets, commercial mortgages, equity securities, private equity investments and real estate held through direct ownership. Of the total exposure, $44 \%$ was denominated in foreign currencies, substantially all of which was hedged back to U.S. dollars. The total exposure was concentrated primarily in The Netherlands (28\%), France (19\%), Italy (13\%), Germany (11\%), Luxembourg (7\%), Ireland (5\%) and Sweden (5\%).

## Fixed Maturity Securities

## Fixed Maturity Securities by Contractual Maturity Date

The following table sets forth the breakdown of the amortized cost of our fixed maturity securities portfolio by contractual maturity as of the date indicated:

|  | December 31, 2016 |  |
| :---: | :---: | :---: |
|  | Amortized Cost | \% of Total |
|  | (\$ in millions) |  |
| Corporate \& government securities: |  |  |
| Maturing in 2017 | \$ 8,506 | 3.3\% |
| Maturing in 2018 | 8,005 | 3.1 |
| Maturing in 2019 | 8,976 | 3.5 |
| Maturing in 2020 | 10,093 | 3.9 |
| Maturing in 2021 | 11,449 | 4.5 |
| Maturing in 2022 | 10,030 | 3.9 |
| Maturing in 2023 | 10,776 | 4.2 |
| Maturing in 2024 | 10,572 | 4.1 |
| Maturing in 2025 | 10,624 | 4.1 |
| Maturing in 2026 | 10,524 | 4.1 |
| Maturing in 2027 | 6,564 | 2.6 |
| Maturing in 2028 and beyond | 129,678 | 50.4 |
| Total corporate \& government securities | 235,797 | 91.7 |
| Asset-backed securities | 8,182 | 3.2 |
| Commercial mortgage-backed securities | 8,883 | 3.4 |
| Residential mortgage-backed securities | 4,352 | 1.7 |
| Total fixed maturities | \$257,214 | 100.0\% |

## Fixed Maturity Securities and Unrealized Gains and Losses by Industry Category

The following table sets forth the composition of the portion of our fixed maturity securities portfolio by industry category attributable to PFI excluding the Closed Block division as of the dates indicated and the associated gross unrealized gains and losses:


[^4](4) Includes securities related to the Build America Bonds program.
(5) Excluded from the table above are securities held outside the general account in other entities and operations. For additional information regarding investments held outside the general account, see "-Invested Assets of Other Entities and Operations" below. Also excluded from the table above are fixed maturity securities classified as trading. See "-Trading Account Assets Supporting Insurance Liabilities" and "-Other Trading Account Assets" for additional information.

The increase in net unrealized gains from December 31, 2015 to December 31, 2016, was primarily due to a net increase in fair value driven by a decrease in interest rates in Japan and credit spread tightening.

## Asset-Backed Securities

The following tables set forth the amortized cost and fair value of our asset-backed securities attributable to PFI excluding the Closed Block division, by credit quality, as of the dates indicated:

## Asset-Backed Securities at Amortized Cost

|  | December 31, 2016 |  |  |  |  |  | $\begin{gathered} \text { Total } \\ \text { December 31, } \\ 2015 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest Rating Agency Rating |  |  |  |  | Total Amortized Cost |  |
|  | AAA | AA | A | BBB | BB and below |  |  |
|  |  |  |  |  | millions) |  |  |
| Collateralized by sub-prime mortgages(1) | \$ 0 | \$ 0 | \$18 | \$36 | \$352 | \$ 406 | \$1,141 |
| Collateralized loan obligations | 6,178 | 18 | 0 | 0 | 0 | 6,196 | 4,280 |
| Collateralized by education loans(2) | 28 | 370 | 0 | 0 | 0 | 398 | 392 |
| Collateralized by credit cards | 116 | 0 | 0 | 0 | 0 | 116 | 201 |
| Collateralized by auto loans | 818 | 0 | 0 | 0 | 0 | 818 | 518 |
| Other asset-backed securities(3) | 7 | 75 | 38 | 22 | 106 | 248 | 341 |
| Total asset-backed securities(4) | \$7,147 | \$463 | \$56 | \$58 | \$458 | \$8,182 | \$6,873 |

(1) While there is no market standard definition for securities collateralized by sub-prime mortgages, we define sub-prime mortgages as residential mortgages that are originated to weaker-quality obligors as indicated by weaker credit scores, as well as mortgages with higher loan-to-value ratios or limited documentation.
(2) All of the $\$ 398$ million of education loans included above carry a Department of Education guaranty as of December 31, 2016.
(3) Includes asset-backed securities collateralized by bond obligations, aircraft, equipment leases, franchises and timeshares.
(4) Excluded from the table above are asset-backed securities held outside the general account in other entities and operations. Also excluded from the table above are asset-backed securities classified as trading.

## Asset-Backed Securities at Fair Value

|  | December 31, 2016 |  |  |  |  |  | $\begin{gathered} \text { Total } \\ \text { December 31, } \\ 2015 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest Rating Agency Rating |  |  |  |  | Total <br> Fair Value |  |
|  | AAA | AA | A | BBB | BB and below |  |  |
|  | (in millions) |  |  |  |  |  |  |
| Collateralized by sub-prime mortgages(1) | \$ 0 | \$ 0 | \$19 | \$36 | \$432 | \$ 487 | \$1,189 |
| Collateralized loan obligations | 6,231 | 18 | 0 | 0 | 0 | 6,249 | 4,317 |
| Collateralized by education loans(2) | 28 | 379 | 0 | 0 | 0 | 407 | 395 |
| Collateralized by credit cards | 119 | 0 | 0 | 0 | 0 | 119 | 206 |
| Collateralized by auto loans | 816 | 0 | 0 | 0 | 0 | 816 | 516 |
| Other asset-backed securities(3) | 6 | 76 | 43 | 22 | 124 | 271 | 376 |
| Total asset-backed securities(4) | \$7,200 | \$473 | \$62 | \$58 | \$556 | \$8,349 | \$6,999 |

(1) While there is no market standard definition for securities collateralized by sub-prime mortgages, we define sub-prime mortgages as residential mortgages that are originated to weaker-quality obligors as indicated by weaker credit scores, as well as mortgages with higher loan-to-value ratios or limited documentation.
(2) All of the $\$ 407$ million of education loans included above carry a Department of Education guaranty as of December 31, 2016.
(3) Includes asset-backed securities collateralized by bond obligations, aircraft, equipment leases, franchises and timeshares.
(4) Excluded from the table above are asset-backed securities held outside the general account in other entities and operations. Also excluded from the table above are asset-backed securities classified as trading.

The tables above provide ratings as assigned by nationally recognized rating agencies as of December 31, 2016, including Standard \& Poor's, Moody's and Fitch. In making our investment decisions, rather than relying solely on the rating agencies' evaluations, we assign internal ratings to our asset-backed securities based upon our dedicated asset-backed securities unit's independent evaluation of the underlying collateral and securitization structure, including any guarantees from monoline bond insurers.

## Residential Mortgage-Backed Securities

The following table sets forth the amortized cost of our residential mortgage-backed securities attributable to PFI excluding the Closed Block division as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | \% of Total | Amortized Cost | \% of Total |
|  | (\$ in millions) |  |  |  |
| By security type: |  |  |  |  |
| Agency pass-through securities(1) | \$3,803 | 87.4\% | \$4,382 | 90.1\% |
| Collateralized mortgage obligations | 549 | 12.6 | 479 | 9.9 |
| Total residential mortgage-backed securities | \$4,352 | 100.0\% | \$4,861 | 100.0\% |
| Portion rated AA or higher(2) | \$4,114 | 94.5\% | \$4,791 | 98.6\% |

(1) As of December 31, 2016, of these securities, $\$ 2.834$ billion are supported by the U.S. government, and $\$ 0.969$ billion are supported by foreign governments. As of December 31, 2015, of these securities, $\$ 3.267$ billion were supported by the U.S. government, and $\$ 1.115$ billion were supported by foreign governments.
(2) Based on lowest external rating agency rating.

## Commercial Mortgage-Backed Securities

The following tables set forth the amortized cost and fair value of our commercial mortgage-backed securities attributable to PFI excluding the Closed Block division as of the dates indicated, by credit quality and by year of issuance (vintage):

## Commercial Mortgage-Backed Securities at Amortized Cost

| Vintage | December 31, 2016 |  |  |  |  |  | $\begin{gathered} \text { Total } \\ \text { December 31, } \\ 2015 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest Rating Agency Rating(1) |  |  |  |  | Total Amortized Cost |  |
|  | AAA | AA | A | BBB | BB and below |  |  |
|  |  |  |  |  | millions |  |  |
| 2016 | \$2,071 | \$348 | \$32 | \$0 | \$0 | \$2,451 | \$ 0 |
| 2015 | 617 | 146 | 2 | 0 | 0 | 765 | 607 |
| 2014 | 2,474 | 2 | 2 | 0 | 0 | 2,478 | 2,420 |
| 2013 | 2,472 | 99 | 0 | 9 | 0 | 2,580 | 2,568 |
| 2012-2009 | 168 | 239 | 0 | 0 | 0 | 407 | 469 |
| 2008-2007 | 101 | 43 | 3 | 0 | 0 | 147 | 113 |
| 2006 \& Prior | 52 | 0 | 3 | 0 | 0 | 55 | 1,123 |
| Total commercial mortgage-backed securities(2)(3)(4) | \$7,955 | \$877 | \$42 | \$9 | \$0 | \$8,883 | \$7,300 |

(1) The table above provides ratings as assigned by nationally recognized rating agencies as of December 31, 2016.
(2) Excluded from the table above are commercial mortgage-backed securities held outside the general account in other entities and operations. Also excluded from the table above are commercial mortgage-backed securities classified as trading.
(3) Included in the table above, as of December 31, 2016, are downgraded super senior securities with amortized cost of $\$ 16$ million in AA and $\$ 3$ million in A.
(4) Included in the table above, as of December 31, 2016, are agency commercial mortgage-backed securities with amortized cost of $\$ 890$ million, all rated A or higher.

## Commercial Mortgage-Backed Securities at Fair Value

|  |  |  | Dece | ber 31 | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | t Rat | g Ag | cy Ra | ng(1) |  |  |
| Vintage | AAA | AA | A | BBB | BB and below | Total <br> Fair Value | $\begin{gathered} \text { Total } \\ \text { December 31, } \\ 2015 \end{gathered}$ |
|  |  |  |  |  | millions |  |  |
| 2016 | \$2,010 | \$338 | \$31 | \$0 | \$0 | \$2,379 | \$ 0 |
| 2015 | 620 | 143 | 2 | 0 | 0 | 765 | 601 |
| 2014 | 2,548 | 3 | 2 | 0 | 0 | 2,553 | 2,471 |
| 2013 | 2,561 | 102 | 0 | 8 | 0 | 2,671 | 2,621 |
| 2012-2009 | 167 | 250 | 0 | 0 | 0 | 417 | 480 |
| 2008-2007 | 101 | 44 | 3 | 0 | 0 | 148 | 115 |
| 2006 \& Prior | 56 | 0 | 3 | 0 | 0 | 59 | 1,135 |
| Total commercial mortgage-backed securities(2)(3) | \$8,063 | \$880 | \$41 | \$8 | \$0 | \$8,992 | \$7,423 |

[^5](2) Excluded from the table above are commercial mortgage-backed securities held outside the general account in other entities and operations. Also excluded from the table above are commercial mortgage-backed securities classified as trading.
(3) Included in the table above, as of December 31, 2016, are agency commercial mortgage-backed securities with fair value of $\$ 892$ million, all rated A or higher.

## Fixed Maturity Securities Credit Quality

The Securities Valuation Office ("SVO") of the NAIC, evaluates the investments of insurers for statutory reporting purposes and assigns fixed maturity securities to one of six categories called "NAIC Designations." In general, NAIC Designations of " 1 " highest quality, or " 2 " high quality, include fixed maturities considered investment grade, which include securities rated Baa3 or higher by Moody's or BBB- or higher by Standard \& Poor's. NAIC Designations of " 3 " through " 6 " generally include fixed maturities referred to as below investment grade, which include securities rated Ba1 or lower by Moody's and BB+ or lower by Standard \& Poor's. The NAIC Designations for commercial mortgage-backed securities and non-agency residential mortgage-backed securities, including our assetbacked securities collateralized by sub-prime mortgages, are based on security level expected losses as modeled by an independent thirdparty (engaged by the NAIC) and the statutory carrying value of the security, including any purchase discounts or impairment charges previously recognized.

As a result of time lags between the funding of investments, the finalization of legal documents, and the completion of the SVO filing process, the fixed maturity portfolio generally includes securities that have not yet been designated by the SVO as of each balance sheet date. Pending receipt of SVO designations, the categorization of these securities by NAIC Designation is based on the expected ratings indicated by internal analysis.

Investments of our international insurance companies are not subject to NAIC guidelines. Investments of our Japanese insurance operations are regulated locally by the FSA, an agency of the Japanese government. The FSA has its own investment quality criteria and risk control standards. Our Japanese insurance companies comply with the FSA's credit quality review and risk monitoring guidelines. The credit quality ratings of the investments of our Japanese insurance companies are based on ratings assigned by nationally recognized credit rating agencies, including Moody's, Standard \& Poor's, or rating equivalents based on ratings assigned by Japanese credit ratings agencies.

The following table sets forth our fixed maturity portfolio by NAIC Designation or equivalent ratings attributable to PFI excluding the Closed Block division as of the dates indicated:

(1) Reflects equivalent ratings for investments of the international insurance operations.
(2) Includes, as of December 31, 2016 and 2015, 918 securities with amortized cost of $\$ 4,634$ million (fair value, $\$ 4,759$ million) and 938 securities with amortized cost of $\$ 4,253$ million (fair value, $\$ 4,325$ million), respectively, that have been categorized based on expected NAIC Designations pending receipt of SVO ratings.
(3) Includes $\$ 380$ million of gross unrealized gains and $\$ 0$ million of gross unrealized losses as of December 31, 2016, compared to $\$ 316$ million of gross unrealized gains and $\$ 0$ million of gross unrealized losses as of December 31, 2015, on securities classified as held-to-maturity.
(4) As of December 31, 2016, includes gross unrealized losses of $\$ 149$ million on public fixed maturities and $\$ 154$ million on private fixed maturities considered to be other than high or highest quality and, as of December 31, 2015, includes gross unrealized losses of $\$ 212$ million on public fixed maturities and $\$ 196$ million on private fixed maturities considered to be other than high or highest quality.
(5) On an amortized cost basis, as of December 31, 2016, includes $\$ 211,753$ million of public fixed maturities and $\$ 32,812$ million of private fixed maturities and, as of December 31, 2015, includes $\$ 190,638$ million of public fixed maturities and $\$ 30,443$ million of private fixed maturities.
(6) On an amortized cost basis, as of December 31, 2016, includes $\$ 7,170$ million of public fixed maturities and $\$ 5,479$ million of private fixed maturities and, as of December 31, 2015, includes $\$ 5,836$ million of public fixed maturities and $\$ 4,363$ million of private fixed maturities.
(7) On an amortized cost basis, as of December 31, 2016, securities considered below investment grade based on lowest of external rating agency ratings, total $\$ 13,820$ million, or $5 \%$ of the total fixed maturities, and include securities considered high or highest quality by the NAIC based on the rules described above.

## Credit Derivative Exposure to Public Fixed Maturities

In addition to the credit exposure from public fixed maturities noted above, we sell credit derivatives to enhance the return on our investment portfolio by creating credit exposure similar to an investment in public fixed maturity cash instruments.

In a credit derivative, we may sell credit protection on an identified name or a broad based index, and in return receive a quarterly premium. The majority of the underlying reference names in single name and index credit derivatives where we have sold credit protection,
as well as all the counterparties to these agreements, are investment grade credit quality and our credit derivatives have a remaining term to maturity of thirty-one years or less. The premium or credit spread generally corresponds to the difference between the yield on the reference name's (or index's underlying reference names) public fixed maturity cash instruments and swap rates at the time the agreement is executed. Credit derivative contracts are recorded at fair value with changes in fair value, including the premiums received, recorded in "Realized investment gains (losses), net."

As of December 31, 2016 and 2015, PFI excluding the Closed Block division had $\$ 162$ million and $\$ 807$ million, respectively, of notional amounts of exposure, where we have sold credit protection through credit derivatives, reported at fair value as an asset of less than $\$ 1$ million and a liability of $\$ 27$ million, respectively. "Realized investment gains (losses), net" from credit derivatives we sold was a gain of $\$ 7$ million and $\$ 6$ million for the years ended December 31, 2016 and 2015, respectively. This excludes a credit derivative related to surplus notes issued by a subsidiary of Prudential Insurance. See Note 14 to the Consolidated Financial Statements for additional information regarding this derivative.

In addition to selling credit protection, we have purchased credit protection using credit derivatives in order to hedge specific credit exposures in our investment portfolio. As of December 31, 2016 and 2015, PFI excluding the Closed Block division had $\$ 141$ million and $\$ 409$ million of notional amounts, respectively, reported at fair value as a liability of $\$ 4$ million for both years. "Realized investment gains (losses), net" from credit derivatives we purchased was a loss of $\$ 5$ million and $\$ 9$ million for the years ended December 31, 2016 and 2015, respectively. See Note 14 to the Consolidated Financial Statements for additional information regarding credit derivatives and an overall description of our derivative activities.

## OTTI of Fixed Maturity Securities

We maintain separate monitoring processes for public and private fixed maturities and create watch lists to highlight securities that require special scrutiny and management. Our public fixed maturity asset managers review all public fixed maturity holdings on a quarterly basis and more frequently when necessary to identify potential credit deterioration whether due to ratings downgrades, unexpected price variances and/or company or industry specific concerns.

For private placements, our credit and portfolio management processes help ensure prudent controls over valuation and management. We have separate pricing and authorization processes to establish "checks and balances" for new investments. We apply consistent standards of credit analysis and due diligence for all transactions, whether they originate through our own in-house origination staff or through agents. Our regional offices closely monitor the portfolios in their regions. We set all valuation standards centrally, and we assess the fair value of all investments quarterly. Our private fixed maturity asset managers formally review all private fixed maturity holdings on a quarterly basis and more frequently when necessary to identify potential credit deterioration whether due to ratings downgrades, unexpected price variances and/or company or industry specific concerns. For additional information regarding our policies regarding OTTI for fixed maturity securities, see Note 2 to the Consolidated Financial Statements.

OTTI of general account fixed maturity securities attributable to PFI excluding the Closed Block division that were recognized in earnings were $\$ 144$ million, $\$ 97$ million and $\$ 36$ million for the years ended December 31, 2016, 2015 and 2014, respectively. For a further discussion of OTTI, see "-Realized Investment Gains (Losses)" above.

## Trading Account Assets Supporting Insurance Liabilities

The following table sets forth the composition of the TAASIL portfolio attributable to PFI excluding the Closed Block division as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Short-term investments and cash equivalents | \$ 655 | \$ 655 | \$ 765 | \$ 765 |
| Fixed maturities: |  |  |  |  |
| Corporate securities | 13,903 | 13,997 | 12,797 | 12,851 |
| Commercial mortgage-backed securities | 2,032 | 2,052 | 1,860 | 1,862 |
| Residential mortgage-backed securities | 1,142 | 1,150 | 1,411 | 1,428 |
| Asset-backed securities . | 1,333 | 1,349 | 1,295 | 1,299 |
| Foreign government bonds | 915 | 926 | 680 | 694 |
| U.S. government authorities and agencies and obligations of U.S. states | 330 | 376 | 326 | 369 |
| Total fixed maturities | 19,655 | 19,850 | 18,369 | 18,503 |
| Equity securities | 1,097 | 1,335 | 1,030 | 1,254 |
| Total trading account assets supporting insurance liabilities(1) . | \$21,407 | \$21,840 | \$20,164 | \$20,522 |

(1) As a percentage of amortized cost, $80 \%$ and $77 \%$ of the portfolio was publicly-traded as of December 31, 2016 and 2015, respectively.

## Other Trading Account Assets

Other trading account assets consist primarily of certain financial instruments that contain an embedded derivative where we elected to classify the entire instrument as a trading account asset rather than bifurcate. These instruments are carried at fair value, with realized and unrealized gains (losses) reported in "Other income" and excluded from adjusted operating income. Interest and dividend income from these investments is reported in "Net investment income" and is included in adjusted operating income.

The following table sets forth the composition of our other trading account assets attributable to PFI excluding the Closed Block division as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Amortized } \\ \text { Cost } \end{gathered}$ | Fair <br> Value | Amortized Cost | $\begin{gathered} \text { Fair } \\ \text { Value } \end{gathered}$ |
|  | (in millions) |  |  |  |
| Short-term investments and cash equivalents | \$ 1 | \$ 1 | \$ | \$ 1 |
| Fixed maturities | 1,201 | 1,058 | 1,016 | 964 |
| Equity securities(1) | 412 | 462 | 537 | 596 |
| Total other trading account assets | \$1,614 | \$1,521 | \$1,554 | \$1,561 |

(1) Included in equity securities are perpetual preferred stock securities that have characteristics of both debt and equity securities.

## Commercial Mortgage and Other Loans

## Investment Mix

As of December 31, 2016 and 2015, we held approximately $11 \%$ and $12 \%$, respectively, of our general account investments attributable to PFI excluding the Closed Block division in commercial mortgage and other loans. These percentages are net of a $\$ 90$ million and $\$ 95$ million allowance for losses as of December 31, 2016 and 2015, respectively.

The following table sets forth the composition of our commercial mortgage and other loans portfolio, before the allowance for losses, attributable to PFI excluding the Closed Block division as of the dates indicated:

|  | December 31, | December 31, 2015 |
| :---: | :---: | :---: |
|  |  | lions) |
| Commercial mortgage and agricultural property loans | \$41,964 | \$39,002 |
| Uncollateralized loans | 636 | 966 |
| Residential property loans | 252 | 301 |
| Other collateralized loans | 9 | 312 |
| Total commercial mortgage and other loans(1)(2) | \$42,861 | \$40,581 |

(1) As a percentage of recorded investment gross of allowance, more than $99 \%$ of these assets were current as of both December 31, 2016 and 2015 .
(2) Excluded from the table above are commercial mortgage and other loans held outside the general account in other entities and operations. For additional information regarding commercial mortgage and other loans held outside the general account, see "-Invested Assets of Other Entities and Operations" below.

We originate commercial mortgage and agricultural property loans using a dedicated investment staff through our various regional offices in the U.S. and international offices primarily in London and Tokyo. All loans are underwritten consistently to our standards using a proprietary quality rating system that has been developed from our experience in real estate and mortgage lending.

Uncollateralized loans primarily represent corporate loans which do not meet the definition of a security under authoritative accounting guidance.

Residential property loans primarily include Japanese recourse loans. Upon default of these recourse loans, we can make a claim against the personal assets of the property owner, in addition to the mortgaged property. These loans are also backed by third-party guarantors.

Other collateralized loans include collateralized structured loans and consumer loans.

## Composition of Commercial Mortgage and Agricultural Property Loans

Our commercial mortgage and agricultural property loan portfolio strategy emphasizes diversification by property type and geographic location. The following tables set forth the breakdown of the gross carrying values of our general account investments in
commercial mortgage and agricultural property loans attributable to PFI excluding the Closed Block division by geographic region and property type as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Gross Carrying Value | $\begin{gathered} \% \text { of } \\ \text { Total } \\ \hline \end{gathered}$ | Gross Carrying Value | $\begin{gathered} \% \text { of } \\ \text { Total } \\ \hline \end{gathered}$ |
|  | (\$ in millions) |  |  |  |
| Commercial mortgage and agricultural property loans by region: |  |  |  |  |
| U.S. Regions: |  |  |  |  |
| Pacific | \$13,817 | 32.9\% | \$12,285 | 31.5\% |
| South Atlantic | 8,066 | 19.2 | 7,764 | 19.9 |
| Middle Atlantic | 5,476 | 13.1 | 5,271 | 13.5 |
| East North Central | 2,341 | 5.6 | 2,704 | 6.9 |
| West South Central | 4,506 | 10.7 | 3,945 | 10.1 |
| Mountain | 1,796 | 4.3 | 1,697 | 4.4 |
| New England | 1,774 | 4.2 | 1,752 | 4.5 |
| West North Central | 621 | 1.5 | 608 | 1.6 |
| East South Central | 595 | 1.4 | 533 | 1.4 |
| Subtotal-U.S. | 38,992 | 92.9 | 36,559 | 93.8 |
| Europe | 1,725 | 4.1 | 1,608 | 4.1 |
| Asia | 504 | 1.2 | 406 | 1.0 |
| Other | 743 | 1.8 | 429 | 1.1 |
| Total commercial mortgage and agricultural property loans | \$41,964 | 100.0\% | \$39,002 | 100.0\% |
|  | December 31, 2016 |  | December 31, 2015 |  |
|  | Gross Carrying Value | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | $\begin{gathered} \text { Gross } \\ \text { Carrying } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ |
|  | (\$ in millions) |  |  |  |
| Commercial mortgage and agricultural property loans by property type: |  |  |  |  |
| Industrial | \$ 6,899 | 16.5\% | \$ 6,510 | 16.7\% |
| Retail | 6,562 | 15.6 | 6,813 | 17.5 |
| Office | 9,619 | 22.9 | 8,498 | 21.8 |
| Apartments/Multi-Family . | 11,488 | 27.4 | 10,079 | 25.8 |
| Other . | 3,368 | 8.0 | 3,133 | 8.0 |
| Agricultural properties | 2,279 | 5.4 | 2,130 | 5.5 |
| Hospitality | 1,749 | 4.2 | 1,839 | 4.7 |
| Total commercial mortgage and agricultural property loans | \$41,964 | 100.0\% | \$39,002 | 100.0\% |

Loan-to-value and debt service coverage ratios are measures commonly used to assess the quality of commercial mortgage and agricultural property loans. The loan-to-value ratio compares the amount of the loan to the fair value of the underlying property collateralizing the loan and is commonly expressed as a percentage. A loan-to-value ratio less than $100 \%$ indicates an excess of collateral value over the loan amount. Loan-to-value ratios greater than $100 \%$ indicate that the loan amount exceeds the collateral value. The debt service coverage ratio compares a property's net operating income to its debt service payments. Debt service coverage ratios less than 1.0 times indicate that property operations do not generate enough income to cover the loan's current debt payments. A debt service coverage ratio greater than 1.0 times indicates an excess of net operating income over the debt service payments.

As of December 31, 2016, our general account investments in commercial mortgage and agricultural property loans attributable to PFI excluding the Closed Block division had a weighted average debt service coverage ratio of 2.38 times and a weighted average loan-to-value ratio of $55 \%$. As of December 31, 2016, approximately $96 \%$ of commercial mortgage and agricultural property loans were fixed rate loans. For those general account commercial mortgage and agricultural property loans that were originated in 2016, the weighted average debt service coverage ratio was 2.47 times, and the weighted average loan-to-value ratio was $62 \%$.

The values utilized in calculating these loan-to-value ratios are developed as part of our periodic review of the commercial mortgage and agricultural property loan portfolio, which includes an internal evaluation of the underlying collateral value. Our periodic review also includes a quality re-rating process, whereby we update the internal quality rating originally assigned at underwriting based on the proprietary quality rating system mentioned above. As discussed below, the internal quality rating is a key input in determining our allowance for loan losses.

For loans with collateral under construction, renovation or lease-up, a stabilized value and projected net operating income are used in the calculation of the loan-to-value and debt service coverage ratios. Our commercial mortgage and agricultural property loan portfolio included approximately $\$ 1.4$ billion of such loans as of both December 31, 2016 and 2015. All else being equal, these loans are inherently more risky than those collateralized by properties that have already stabilized. As of December 31, 2016, there are no loan-specific reserves related to these loans. In addition, these unstabilized loans are included in the calculation of our portfolio reserve as discussed below.

The following table sets forth the gross carrying value of our general account investments in commercial mortgage and agricultural property loans attributable to PFI excluding the Closed Block division as of the date indicated by loan-to-value and debt service coverage ratios:

## Commercial Mortgage and Agricultural Property Loans by Loan-to-Value and Debt Service Coverage Ratios

|  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Debt Service Coverage Ratio |  |  |  |
|  | $\geq 1.2 \mathrm{x}$ | $\begin{gathered} 1.0 \mathrm{x} \\ \text { to } \\ <1.2 \mathrm{x} \end{gathered}$ | $\begin{aligned} & \text { Less } \\ & \text { than } \\ & 1.0 \mathrm{x} \end{aligned}$ | Total <br> Commercial <br> Mortgage <br> and <br> Agricultural <br> Property <br> Loans |
| Loan-to-Value Ratio | (in millions) |  |  |  |
| 0\%-59.99\% | \$23,986 | \$ 420 | \$553 | \$24,959 |
| 60\%-69.99\% | 10,730 | 363 | 115 | 11,208 |
| 70\%-79.99\% | 4,862 | 597 | 57 | 5,516 |
| 80\% or greater | 130 | 50 | 101 | 281 |
| Total commercial | \$39,708 | \$1,430 | \$826 | \$41,964 |

The following table sets forth the breakdown of our commercial mortgage and agricultural property loans attributable to PFI excluding the Closed Block division as of the date indicated by year of origination:

|  | December 31, 2016 |  |
| :---: | :---: | :---: |
|  | Gross $\begin{gathered}\text { Carrying } \\ \text { Value }\end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { Total } \end{gathered}$ |
| Year of Origination | (\$ in millions) |  |
| 2016 | \$ 7,482 | 17.8\% |
| 2015 | 7,743 | 18.5 |
| 2014 | 7,136 | 17.0 |
| 2013 | 7,488 | 17.8 |
| 2012 | 3,807 | 9.1 |
| 2011 | 3,436 | 8.2 |
| 2010 | 1,975 | 4.7 |
| 2009 \& Prior | 2,897 | 6.9 |
| Total commercial | \$41,964 | 100.0\% |

## Commercial Mortgage and Other Loans by Contractual Maturity Date

The following table sets forth the breakdown of our commercial mortgage and other loans portfolio by contractual maturity as of the date indicated:

|  | Decemb | 31, 2016 |
| :---: | :---: | :---: |
|  | Gross Carrying Value | \% of Total |
|  | (\$ in | illions) |
| Vintage |  |  |
| Maturing in 2017 | \$ 1,786 | 4.1\% |
| Maturing in 2018 | 3,075 | 7.2 |
| Maturing in 2019 | 3,243 | 7.6 |
| Maturing in 2020 | 4,179 | 9.8 |
| Maturing in 2021 | 3,546 | 8.3 |
| Maturing in 2022 | 3,084 | 7.2 |
| Maturing in 2023 | 3,024 | 7.1 |
| Maturing in 2024 | 2,743 | 6.4 |
| Maturing in 2025 | 4,415 | 10.3 |
| Maturing in 2026 | 4,334 | 10.1 |
| Maturing in 2027 | 1,508 | 3.5 |
| Maturing in 2028 and beyond . | 7,924 | 18.4 |
| Total commercial mortgag | \$42,861 | 100.0\% |

## Commercial Mortgage and Other Loans Quality

Ongoing review of the portfolio is performed, and loans are placed on watch list status based on a predefined set of criteria, where they are assigned to one of the following categories. We classify loans as closely monitored when we determine there is a collateral deficiency or other credit events that may lead to a potential loss of principal or interest. Loans not in good standing are those loans where we have concluded that there is a high probability of loss of principal, such as when the loan is in the process of foreclosure or the borrower is in bankruptcy. Our workout and special servicing professionals manage the loans on the watch list. As described below, in determining our allowance for losses we evaluate each loan on the watch list to determine if it is probable that amounts due according to the contractual terms of the loan agreement will not be collected.

We establish an allowance for losses to provide for the risk of credit losses inherent in the lending process. The allowance includes loan-specific reserves for loans that are determined to be impaired as a result of our loan review process and a portfolio reserve for probable incurred but not specifically identified losses for loans which are not on the watch list. We define an impaired loan as a loan for which we estimate it is probable that amounts due according to the contractual terms of the loan agreement will not be collected. The loanspecific portion of the loss allowance is based on our assessment as to ultimate collectability of loan principal and interest. Valuation allowances for an impaired loan are recorded based on the present value of expected future cash flows discounted at the loan's effective interest rate, or based on the fair value of the collateral if the loan is collateral dependent. The portfolio reserve for incurred but not specifically identified losses considers the current credit composition of the portfolio based on the internal quality ratings mentioned above. The portfolio reserves are determined using past loan experience, including historical credit migration, loss probability and loss severity factors by property type. These factors are reviewed and updated as appropriate. The valuation allowance for commercial mortgage and other loans can increase or decrease from period to period based on these factors.

The following table sets forth the change in valuation allowances for our commercial mortgage and other loans portfolio as of the dates indicated:

|  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2015 \end{gathered}$ |
| :---: | :---: | :---: |
|  | (in mi | lions) |
| Allowance, beginning of year | \$95 | \$99 |
| Addition to (release of) allowance for losses | (6) | (4) |
| Charge-offs, net of recoveries | 0 | 0 |
| Change in foreign exchange | 1 | 0 |
| Allowance, end of period | \$90 | \$95 |
| Loan-specific reserve | \$ 6 | \$ 0 |
| Portfolio reserve | \$84 | \$95 |

The decrease in the allowance for losses for the year ended December 31, 2016 was primarily driven by improved credit quality of the portfolio.

## Equity Securities

## Investment Mix

The equity securities attributable to PFI excluding the Closed Block division consist principally of investments in common and preferred stock of publicly-traded companies, as well as mutual fund shares. The following table sets forth the composition of our equity securities portfolio and the associated gross unrealized gains and losses as of the dates indicated:

|  | December 31, 2016 |  |  |  | December 31, 2015 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
|  | (in millions) |  |  |  |  |  |  |  |
| Non-redeemable preferred stocks | \$ 9 | \$ 0 | \$ 2 | \$ 7 | \$ 21 | \$ 1 | \$ 1 | \$ 21 |
| Mutual funds(1) | 3,193 | 545 | 2 | 3,736 | 2,918 | 333 | 76 | 3,175 |
| Other common stocks | 2,207 | 1,229 | 16 | 3,420 | 2,033 | 1,339 | 31 | 3,341 |
| Total equity securities(2) | $\underline{\underline{\$ 5,409}}$ | $\underline{\underline{\$ 1,774}}$ | $\underline{\$ 20}$ | \$7,163 | $\underline{\underline{\$ 4,972}}$ | $\underline{\underline{\$ 1,673}}$ | $\underline{\$ 108}$ | $\underline{\text { \$6,537 }}$ |

(1) Includes mutual fund shares representing our interest in the underlying assets of certain investments supporting corporate-owned life insurance. These mutual funds invest primarily in high yield bonds.
(2) Amounts presented exclude investments in private equity and hedge funds and other investments which are reported in "Other long-term investments."

## OTTI of Equity Securities

For those equity securities classified as available-for-sale, we record unrealized gains (losses) to the extent that cost is different from estimated fair value. All securities with unrealized losses are subject to our review to identify OTTI in value. For additional information regarding our policies regarding OTTI for equity securities, see Note 2 to the Consolidated Financial Statements.

OTTI of equity securities attributable to PFI excluding the Closed Block division were $\$ 61$ million, $\$ 111$ million and $\$ 26$ million for the years ended December 31, 2016, 2015 and 2014, respectively. For a further discussion of OTTI, see "-Realized Investment Gains (Losses)" above.

## Other Long-Term Investments

The following table sets forth the composition of "Other long-term investments," which primarily consists of investments in joint ventures and limited partnerships, other than operating joint ventures, as well as wholly-owned investment real estate and other investments attributable to PFI excluding the Closed Block division, as of the dates indicated:

|  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2015 \end{gathered}$ |
| :---: | :---: | :---: |
|  | (in mi | lions) |
| Joint ventures and limited partnerships: |  |  |
| Private equity | \$2,619 | \$2,927 |
| Hedge funds | 1,708 | 1,160 |
| Real estate-related | 451 | 285 |
| Real estate held through direct ownership | 1,677 | 1,456 |
| Other(1) | 776 | 721 |
| Total other long-term investments | \$7,231 | \$6,549 |

(1) Primarily includes derivatives and member and activity stock held in the Federal Home Loan Banks of New York and Boston. For additional information regarding our holdings in the Federal Home Loan Banks of New York and Boston, see Note 14 to the Consolidated Financial Statements.

## OTTI of Other Long-Term Investments

For joint ventures and limited partnerships, the carrying value of these investments is written down or impaired to fair value when a decline in value is considered to be other-than-temporary.

OTTI on joint ventures and limited partnerships attributable to PFI excluding the Closed Block division were $\$ 57$ million, $\$ 121$ million and $\$ 21$ million for the years ended December 31, 2016, 2015 and 2014, respectively. For a further discussion of OTTI, see "-Realized Investment Gains (Losses)" above.

For additional information regarding our policies regarding OTTI for joint ventures and limited partnerships, other than operating joint ventures, as well as wholly-owned investment real estate and other investments, see Note 2 to the Consolidated Financial Statements.

## Invested Assets of Other Entities and Operations

"Invested Assets of Other Entities and Operations" presented below includes investments held outside the general account and primarily represents investments associated with our asset management operations and derivative operations. Our derivative operations act on behalf of affiliates primarily to manage interest rate, foreign currency, credit and equity exposures. Assets within our asset management operations that are managed for third parties and those assets classified as "Separate account assets" on our balance sheet are not included.

|  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2015 \end{gathered}$ |
| :---: | :---: | :---: |
|  | (in m | lions) |
| Fixed maturities: |  |  |
| Public, available-for-sale, at fair value | \$ 237 | \$ 94 |
| Private, available-for-sale, at fair value | 3 | 39 |
| Other trading account assets, at fair value | 3,959 | 12,609 |
| Equity securities, available-for-sale, at fair value | 13 | 11 |
| Commercial mortgage and other loans, at book value(1) | 571 | 302 |
| Other long-term investments | 1,032 | 516 |
| Short-term investments | 14 | 388 |
| Total investments | $\underline{\underline{\$ 5,829}}$ | $\underline{\underline{\$ 13,959}}$ |

(1) Book value is generally based on unpaid principal balance net of any allowance for losses, the lower of cost or fair value, or fair value, depending on the loan.

The $\$ 8$ billion decrease in investments related to the invested assets of other entities and operations in 2016 was primarily attributable to a $\$ 9$ billion decrease in other trading account assets of which $\$ 6$ billion was due to adoption of the consolidation accounting standard update, which resulted in the deconsolidation of certain of its previously consolidated collateralized loan obligations effective January 1 , 2016 and $\$ 3$ billion of additional deconsolidations throughout 2016.

## Other Trading Account Assets

Other trading account assets are primarily related to assets associated with consolidated variable interest entities for which the Company is the investment manager, as well as our derivative operations used to manage interest rate, foreign currency, credit and equity exposures. The assets of the consolidated variable interest entities are generally offset by liabilities for which the fair value option has been elected. For further information on these consolidated variable interest entities, see Note 5 to the Consolidated Financial Statements.

## Commercial Mortgage and Other Loans

Our asset management operations include our commercial mortgage operations, which provide mortgage origination, asset management and servicing for our general account, institutional clients and government-sponsored entities such as Fannie Mae, the Federal Housing Administration and Freddie Mac.

The mortgage loans of our commercial mortgage operations are included in "Commercial mortgage and other loans," with related derivatives and other hedging instruments primarily included in "Other trading account assets" and "Other long-term investments."

## Other Long-Term Investments

Other long-term investments primarily include strategic investments made as part of our asset management operations. We make these strategic investments in real estate, as well as fixed income, public equity and real estate securities, including controlling interests. Certain of these investments are made primarily for purposes of co-investment in our managed funds and structured products. Other strategic investments are made with the intention to sell or syndicate to investors, including our general account, or for placement in funds and structured products that we offer and manage (seed investments). As part of our asset management operations, we also make loans to our managed funds that are secured by equity commitments from investors or assets of the funds. Other long-term investments also include certain assets in consolidated investment funds where the Company is deemed to exercise control over the funds.

## Liquidity and Capital Resources

## Overview

Liquidity refers to the ability to generate sufficient cash resources to meet the payment obligations of the Company. Capital refers to the long-term financial resources available to support the operations of our businesses, fund business growth, and provide a cushion to withstand adverse circumstances. Our ability to generate and maintain sufficient liquidity and capital depends on the profitability of our businesses, general economic conditions and our access to the capital markets and the alternate sources of liquidity and capital described herein.

Effective and prudent liquidity and capital management is a priority across the organization. Management monitors the liquidity of Prudential Financial and its subsidiaries on a daily basis and projects borrowing and capital needs over a multi-year time horizon through our periodic planning process. We believe that cash flows from the sources of funds available to us are sufficient to satisfy the current liquidity requirements of Prudential Financial and its subsidiaries, including under reasonably foreseeable stress scenarios. We have a capital management framework in place that governs the allocation of capital and approval of capital uses. We also employ a Capital Protection Framework to ensure the availability of capital resources to maintain adequate capitalization on a consolidated basis and competitive RBC ratios and solvency margins for our insurance subsidiaries under various stress scenarios.

Prudential Financial is a Designated Financial Company under Dodd-Frank. As a Designated Financial Company, Prudential Financial is subject to supervision and examination by the Federal Reserve Bank of Boston and to stricter prudential regulatory standards, which include or will include requirements and limitations (many of which are the subject of ongoing rule-making) relating to capital, leverage, liquidity, stress-testing, overall risk management, resolution and recovery plans, credit exposure reporting, early remediation, management interlocks and credit concentration. They may also include additional standards regarding enhanced public disclosure, short-term debt limits and other related subjects. Emerging state and international standards may also impose additional capital and other requirements. For information on these regulatory initiatives and their potential impact on us, see "Business-Regulation" and "Risk Factors" included in Prudential Financial’s 2016 Annual Report on Form 10-K.

During 2016, we took the following significant actions that impacted our liquidity and capital position:

- We executed the Variable Annuities Recapture, which enabled the Individual Annuities segment to distribute $\$ 1.0$ billion of highly liquid assets to Prudential Financial and is expected to result in more efficient management of capital and liquidity associated with our variable annuities business. See "-Results of Operations-Variable Annuities Recapture and Risk Management Strategy" for further details;
- We repurchased $\$ 2.0$ billion of shares of our Common Stock and declared aggregate Common Stock dividends of $\$ 1.2$ billion;
- We retired $\$ 750$ million of our outstanding senior debt through maturities;
- We repurchased $\$ 500$ million of our outstanding senior debt through a tender offer;
- We restructured the terms of a $\$ 3.0$ billion captive financing facility for Regulation XXX reserves by redeeming $\$ 300$ million of outstanding debt under the facility and converting an additional $\$ 300$ million of outstanding debt to a credit-linked note structure;
- We obtained additional financing for Guideline AXXX and Regulation XXX reserves by increasing the amounts outstanding under captive financing facilities by $\$ 553$ million and $\$ 406$ million, respectively; and
- A subsidiary, Prudential Holdings of Japan, entered into a new $¥ 100$ billion three-year syndicated, unsecured committed credit facility, providing us with an additional source of liquidity.


## Capital

Our capital management framework is primarily based on statutory RBC and solvency margin measures. Due to our diverse mix of businesses and applicable regulatory requirements, we apply certain refinements to the framework that are designed to more appropriately reflect risks associated with our businesses on a consistent basis across the Company.

We seek to capitalize all of our subsidiaries and businesses in accordance with their ratings targets, and we believe Prudential Financial's capitalization and use of financial leverage are consistent with those ratings targets. Our long-term senior debt rating targets for Prudential Financial are "A" for Standard \& Poor's Rating Services ("S\&P"), Moody's Investors Service, Inc. ("Moody's"), and Fitch Ratings Ltd. ("Fitch"), and "a" for A.M. Best Company ("A.M. Best"). Our financial strength rating targets for our life insurance companies are "AA/Aa/AA" for S\&P, Moody's and Fitch, respectively, and "A+" for A.M. Best. Some entities may currently be rated below these targets, and not all of our life insurance companies are rated by each of these rating agencies. See "-Ratings" below for a description of the potential impacts of ratings downgrades.

## Capital Governance

Our capital management framework is ultimately reviewed and approved by our Board of Directors (the "Board"). The Board has adopted a Capital Policy that authorizes our Chairman and Chief Executive Officer and Vice Chairman to approve certain capital actions on behalf of the Company and to further delegate authority with respect to capital actions to appropriate officers. Any capital commitment that exceeds the authority granted to senior management under the capital policy is separately authorized by the Board.

In addition, our Capital and Finance Committee ("CFC") reviews the use and allocation of capital above certain threshold amounts to promote the efficient use of capital, consistent with our strategic objectives, ratings aspirations and other goals and targets. This management committee provides a multi-disciplinary due diligence review of specific initiatives or transactions requiring the use of capital, including mergers and acquisitions. The CFC also reviews our annual capital plan (and updates to this plan), as well as our capital, liquidity and financial position, borrowing plans, and related matters prior to the discussion of these items with the Board.

## Capitalization

The primary components of the Company's capitalization consist of equity and outstanding capital debt, including junior subordinated debt. As shown in the table below, as of December 31, 2016, the Company had $\$ 42.9$ billion in capital, all of which was available to support the aggregate capital requirements of its divisions and its Corporate and Other operations. Based on our assessment of these businesses and operations, we believe this level of capital is consistent with our ratings targets.

|  | December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015(1) |
|  | (in millions) |  |
| Equity(2) | \$31,242 | \$29,605 |
| Junior subordinated debt (i.e., hybrid securities) | 5,817 | 5,811 |
| Other capital debt | 5,822 | 6,069 |
| Total capital | \$42,881 | \$41,485 |

(1) Prior period had been revised to conform to current period presentation due to the adoption of ASU 2015-03 regarding the classification of debt issuance costs. For more information, see Note 2 to the Consolidated Financial Statements.
(2) Amounts attributable to Prudential Financial, excluding AOCI.

The decrease in other capital debt from December 31, 2015 primarily reflects a senior debt maturity, which was previously utilized to meet capital requirements of our businesses.

## Insurance Regulatory Capital

We manage Prudential Insurance, Prudential of Japan, Gibraltar Life, and our other domestic and international insurance subsidiaries to regulatory capital levels consistent with our "AA" ratings targets. We utilize the RBC ratio as a primary measure of the capital adequacy of our domestic insurance subsidiaries and the solvency margin ratio as a primary measure of the capital adequacy of our international insurance subsidiaries.

RBC is calculated based on statutory financial statements and risk formulas consistent with the practices of the NAIC. RBC considers, among other things, risks related to the type and quality of the invested assets, insurance-related risks associated with an insurer's products and liabilities, interest rate risks and general business risks. RBC ratio calculations are intended to assist insurance regulators in measuring an insurer's solvency and ability to pay future claims. The reporting of RBC measures is not intended for the purpose of ranking any insurance company or for use in connection with any marketing, advertising or promotional activities, but is available to the public.

The table below presents the RBC ratios of our most significant domestic insurance subsidiaries as of December 31, 2015, the most recent statutory fiscal year-end for these subsidiaries for which RBC information has been filed.


Although not yet filed, we expect the Prudential Insurance, PALAC and Composite RBC ratios to be greater than $400 \%$ as of December 31, 2016.

Similar to the RBC ratios that are employed by U.S. insurance regulators, regulatory authorities in the international jurisdictions in which we operate generally establish some form of minimum solvency margin requirements for insurance companies based on local statutory accounting practices. These solvency margins are a primary measure of the capital adequacy of our international insurance operations. Maintenance of our solvency margins at certain levels is also important to our competitive positioning, as in certain jurisdictions, such as Japan, these solvency margins are required to be disclosed to the public and therefore impact the public perception of an insurer's financial strength.

The table below presents the solvency margin ratios of our most significant international insurance subsidiaries as of September 30, 2016, the most recent date for which this information is available.

|  | Ratio |
| :---: | :---: |
| Prudential of Japan consolidated(1) | 858\% |
| Gibraltar Life consolidated(2) | 975\% |

(1) Includes Prudential Trust Co., Ltd., a subsidiary of Prudential of Japan.
(2) Includes PGFL, a subsidiary of Gibraltar Life.

Although not yet filed, we expect the solvency margin ratio for each of these subsidiaries to be greater than $700 \%$ as of December 31, 2016.

All of our domestic and significant international insurance subsidiaries have capital levels that substantially exceed the minimum level required by applicable insurance regulations.

We evaluate the regulatory capital of our domestic and international insurance operations under reasonably foreseeable stress scenarios and believe we have adequate resources to maintain our capital levels comfortably above regulatory requirements under these scenarios. For further information on the calculation of RBC and solvency margin ratios, as well as regulatory minimums, see Note 15 to the Consolidated Financial Statements.

## Capital Protection Framework

We employ a "Capital Protection Framework" (the "Framework") to ensure that sufficient capital resources are available to maintain adequate capitalization on a consolidated basis and competitive RBC ratios and solvency margins for our insurance subsidiaries under various stress scenarios. The Framework incorporates the potential impacts from market related stresses, including equity markets, real estate, interest rates, credit losses, credit spreads, and foreign currency exchange rates. In evaluating these potential impacts, we assess risk holistically at the enterprise level, recognizing that our business mix may produce results that partially offset on a net basis. The Framework addresses the potential capital consequences, under stress scenarios, of certain of these net risks and the strategies we use to mitigate them, including the following:

- Equity market exposure affecting the statutory capital of the Company as a whole, which we manage through our equity hedge program and on-balance sheet and contingent sources of capital;
- Our decision to manage a portion of our interest rate risk internally, on a net basis, at an enterprise level. In implementing this strategy, we execute intercompany derivative transactions between our Corporate and Other operations and certain business segments. We limit our exposure to the resulting net interest rate risk at the enterprise level through options embedded in our hedging strategy that may be exercised if interest rates decline below certain thresholds. During 2016, primarily as a result of the change in our Individual Annuities' risk management strategy, we replaced a significant portion of these intercompany derivatives with external derivatives and expect to manage most of this interest rate risk within the business segments in the future. For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Corporate and Other" and "Management's Discussion and Analysis of Financial Condition and Results of Operations-Individual Annuities."

We periodically recalibrate our hedging strategies in response to changing market conditions. The Framework accommodates periodic volatility within ranges that we deem acceptable, while also providing for additional potential sources of capital, including on-balance sheet capital, derivatives, and contingent sources of capital. Although we continue to enhance our approach, we believe we currently have access to sufficient resources to maintain adequate capitalization and competitive RBC ratios and solvency margins under a range of potential stress scenarios.

## Captive Reinsurance Companies

We use captive reinsurance companies in our domestic insurance operations to more effectively manage our reserves and capital on an economic basis and to enable the aggregation and transfer of risks. Our captive reinsurance companies assume business from affiliates only. To support the risks they assume, our captives are capitalized to a level we believe is consistent with the "AA" financial strength rating targets of our insurance subsidiaries. All of our captive reinsurance companies are wholly-owned subsidiaries and are located domestically, typically in the state of domicile of the direct writing insurance subsidiary that cedes the majority of business to the captive. In addition to state insurance regulation, our captives are subject to internal policies governing their activities. In the normal course of business we contribute capital to the captives to support business growth and other needs. Prudential Financial has also entered into support agreements with the captives in connection with financing arrangements.

Our domestic life insurance subsidiaries are subject to a regulation entitled "Valuation of Life Insurance Policies Model Regulation," commonly known as "Regulation XXX," and a supporting guideline entitled "The Application of the Valuation of Life Insurance Policies Model Regulation," commonly known as "Guideline AXXX." The regulation and supporting guideline require insurers to establish statutory reserves for term and universal life insurance policies with long-term premium guarantees at a level that exceeds what our actuarial assumptions for this business would otherwise require. We use captive reinsurance companies to finance the portion of the reserves for this business that we consider to be non-economic as described below under "-Financing Activities-Subsidiary borrowings-Financing of regulatory reserves associated with domestic life insurance products."

Through March 31, 2016, we reinsured the living benefit guarantees on certain variable annuity and retirement products from our domestic life insurance companies to a captive reinsurance company, Pruco Re. Effective April 1, 2016, the risks related to these products no longer reside within Pruco Re as a result of the Variable Annuities Recapture. See "-Results of Operations-Variable Annuities Recapture and Risk Management Strategy" for further information. On September 30, 2016, Pruco Re was merged with and into PALAC.

## Shareholder Distributions

## Share Repurchase Program and Shareholder Dividends

In December 2015, the Board authorized the Company to repurchase at management's discretion up to $\$ 1.5$ billion of its outstanding Common Stock during the period from January 1, 2016 through December 31, 2016, which superseded a previous authorization covering a portion of this period. In August 2016, the Board authorized a $\$ 500$ million increase to the authorization for calendar year 2016. As a result, the Company's aggregate share repurchase authorization for the full year 2016 was $\$ 2.0$ billion.

In December 2016, the Board authorized the Company to repurchase at management's discretion up to $\$ 1.25$ billion of its outstanding Common Stock during the period from January 1, 2017 through December 31, 2017.

The timing and amount of share repurchases are determined by management based on market conditions and other considerations, including any increased capital needs of our businesses due to, among other things, changes in regulatory capital requirements and opportunities for growth and acquisitions. Repurchases may be effected in the open market, through derivative, accelerated repurchase and other negotiated transactions and through plans designed to comply with Rule 10b5-1(c) under the Exchange Act.

The following table sets forth information about declarations of Common Stock dividends, as well as repurchases of shares of Prudential Financial's Common Stock, for each of the quarterly periods in 2016 and for the prior four years.

| Quarterly period ended: | Dividend Amount |  | Shares Repurchased |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Share | Aggregate | Shares | Total Cost |
|  | (in millions, except per share data) |  |  |  |
| December 31, 2016 | \$0.70 | \$307 | 6.6 | \$625 |
| September 30, 2016 | \$0.70 | \$309 | 8.1 | \$625 |
| June 30, 2016 | \$0.70 | \$313 | 5.0 | \$375 |
| March 31, 2016 | \$0.70 | \$316 | 5.4 | \$375 |
|  | Dividend Amount |  | Shares Repurchased |  |
| Year ended: | Per Share | Aggregate | Shares | Total Cost |
|  | (in millions, except per share data) |  |  |  |
| December 31, 2015 | \$2.44 | \$1,115 | 12.1 | \$1,000 |
| December 31, 2014 | \$2.17 | \$1,005 | 11.6 | \$1,000 |
| December 31, 2013 | \$1.73 | \$ 810 | 10.0 | \$ 750 |
| December 31, 2012 | \$1.60 | \$ 749 | 11.5 | \$ 650 |

In addition, on February 8, 2017, Prudential Financial's Board of Directors declared a cash dividend of $\$ 0.75$ per share of Common Stock, payable on March 16, 2017. As a Designated Financial Company under Dodd-Frank, Prudential Financial expects to be subject to stricter requirements and limitations regarding capital, leverage and liquidity. Our compliance with these and other requirements under Dodd-Frank could limit our ability to pay Common Stock dividends and/or repurchase shares in the future.

## Liquidity

The principles of our liquidity management framework are described in an enterprise-wide Liquidity Policy that is reviewed and approved by the Board. Liquidity management and stress testing are performed on a legal entity basis as the ability to transfer funds between subsidiaries is limited due in part to regulatory restrictions. Liquidity needs are determined through daily and quarterly cash flow forecasting at the holding company and within our operating subsidiaries. A minimum balance of highly liquid assets of at least $\$ 1.3$ billion is targeted to ensure that adequate liquidity is available at Prudential Financial to cover fixed expenses in the event that we experience reduced cash flows from our operating subsidiaries at a time when access to capital markets is also not available. This targeted minimum balance is reviewed and approved annually by the Board.

We seek to mitigate the risk of having limited or no access to financing due to stressed market conditions by generally pre-funding capital debt in advance of maturity. We mitigate the refinancing risk associated with our debt that is used to fund operating needs by matching the term of debt with the assets financed. To ensure adequate liquidity in stress scenarios, stress testing is performed for our major operating subsidiaries. We seek to further mitigate liquidity risk by maintaining our access to alternative sources of liquidity, as discussed below.

## Liquidity of Prudential Financial

The principal sources of funds available to Prudential Financial, the parent holding company, are dividends and returns of capital from subsidiaries, repayments of operating loans from subsidiaries and highly liquid assets. These sources of funds may be supplemented by Prudential Financial's access to the capital markets as well as the "-Alternative Sources of Liquidity" described below.

The primary uses of funds at Prudential Financial include servicing debt, paying operating expenses, making capital contributions and loans to subsidiaries, paying declared shareholder dividends and repurchasing outstanding shares of Common Stock executed under authority from the Board.

As of December 31, 2016, Prudential Financial had highly liquid assets consisting of cash, short-term investments and U.S. Treasury fixed maturities with a carrying value totaling $\$ 5,393$ million. We maintain an intercompany liquidity account that is designed to optimize the use of cash by facilitating the lending and borrowing of funds between Prudential Financial and its subsidiaries on a daily basis. Excluding net borrowings from this intercompany liquidity account, Prudential Financial had highly liquid assets of $\$ 4,553$ million as of December 31, 2016, a decrease of \$509 million from December 31, 2015.

The following table sets forth Prudential Financial's principal sources and uses of highly liquid assets, excluding net borrowings from our intercompany liquidity account, for the periods indicated.

|  | Year Ended December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Sources: |  |  |
| Dividends and/or returns of capital from subsidiaries(1) | \$3,843 | \$4,632 |
| Net distributions from subsidiaries associated with Variable Annuities Recapture | 1,042 | 0 |
| Proceeds from stock-based compensation and exercise of stock options | 625 | 379 |
| Net income tax receipts | 544 | 0 |
| Interest income from subsidiaries on intercompany agreements, net of interest paid | 214 | 257 |
| Net receipts under intercompany loan agreements(2) | 43 | 3,271 |
| Proceeds from the issuance of junior subordinated debt (hybrid securities) | 0 | 1,000 |
| Proceeds from the issuance of retail medium-term notes | 0 | 180 |
| Other, net | 0 | 190 |
| Total sources | 6,311 | 9,909 |
| Uses: |  |  |
| Share repurchases | \$2,000 | \$1,013 |
| Common Stock dividends(3) | 1,300 | 1,117 |
| Capital contributions to subsidiaries(4) | 939 | 2,545 |
| Interest paid on external debt | 902 | 970 |
| Maturities of long-term senior debt, excluding retail medium-term notes | 750 | 0 |
| Repurchase of medium-term notes | 500 | 77 |
| Class B Stock repurchase settlement | 119 | 651 |
| Cash settlements-terminated swaps | 95 | 0 |
| Repayments from short-term debt, net of proceeds | 16 | 17 |
| Maturities of medium-term notes, excluding retail medium-term notes | 0 | 2,148 |
| Expenditures for new home office construction | 0 | 579 |
| Net income tax payments | 0 | 46 |
| Other, net | 199 | 0 |
| Total uses | 6,820 | 9,163 |
| Net increase (decrease) in highly liquid assets | \$ (509) | \$ 746 |

(1) 2016 includes dividends and/or returns of capital of $\$ 1,238$ million from Prudential Annuities Holding Company, of which $\$ 1,140$ million was from PALAC, $\$ 939$ million from international insurance subsidiaries, $\$ 900$ million from Prudential Insurance, $\$ 746$ million from Asset Management subsidiaries, and $\$ 20$ million from other subsidiaries. Excludes dividends and/or returns of capital associated with the Variable Annuities Recapture. 2015 includes dividends and/or returns of capital of $\$ 1,950$ million from Prudential Insurance, $\$ 1,818$ million from international insurance subsidiaries, $\$ 552$ million from Prudential Annuities Holding Company, of which $\$ 450$ million was from PALAC, $\$ 266$ million from Asset Management subsidiaries, and $\$ 46$ million from other subsidiaries.
(2) 2016 includes net receipts from subsidiaries of $\$ 378$ million from PLAZ, $\$ 116$ million from PLNJ, net proceeds of $\$ 644$ million from the issuance of notes to international insurance subsidiaries, offset by net borrowing of $\$ 600$ million by Prudential Universal Reinsurance Company, $\$ 490$ million by Asset Management subsidiaries and $\$ 5$ million by other subsidiaries. Excludes receipts associated with the Variable Annuities Recapture. 2015 includes net receipts from subsidiaries of $\$ 2,113$ million from Pruco Re, $\$ 300$ million from Prudential Arizona Reinsurance Term Company, $\$ 187$ million from Asset Management subsidiaries and $\$ 6$ million from other subsidiaries, net proceeds of $\$ 820$ million from the issuance of notes to international insurance subsidiaries, and net proceeds of $\$ 496$ million from the issuance of notes to various affiliates to finance new home office construction, offset by net borrowing of $\$ 317$ million by Pruco Life and $\$ 34$ million by PLNJ, and net repayments of $\$ 200$ million to Pruco Re, and $\$ 100$ million to PGIM Real Estate Finance.
(3) Includes cash payments made on dividends declared in prior periods.
(4) 2016 includes capital contributions of $\$ 824$ million to international insurance subsidiaries ( $\$ 159$ million which was related to our indirect investment in AFP Habitat), $\$ 36$ million to Pruco Re, $\$ 74$ million to Asset Management subsidiaries, and $\$ 5$ million to other subsidiaries. Excludes capital contributions associated with the Variable Annuities Recapture. 2015 includes capital contributions of $\$ 1,960$ million to Pruco Re, $\$ 268$ million to Asset Management subsidiaries, $\$ 222$ million to international insurance subsidiaries and $\$ 95$ million to other subsidiaries.

## Restrictions on Dividends and Returns of Capital from Subsidiaries

Our insurance companies are subject to limitations on the payment of dividends and other transfers of funds to Prudential Financial and other affiliates under applicable insurance law and regulation. Also, more generally, the payment of dividends by any of our subsidiaries is subject to declaration by their Board of Directors and can be affected by market conditions and other factors. See Note 15 to the Consolidated Financial Statements for details on specific dividend restrictions.

Domestic insurance subsidiaries. Prudential Insurance is permitted to pay ordinary dividends based on calculations specified under New Jersey insurance law, subject to prior notification to the New Jersey Department of Banking and Insurance ("NJDOBI"). Any distributions above this amount in any twelve month period are considered to be "extraordinary" dividends, and the approval of the NJODBI is required prior to payment. The laws regulating dividends of the states where our other domestic insurance companies are domiciled are similar, but not identical, to New Jersey's. During 2016, Prudential Insurance paid aggregate dividends of $\$ 3.0$ billion ( $\$ 1.0$ billion as an ordinary dividend and $\$ 2.0$ billion as an extraordinary dividend) to Prudential Financial. This amount consisted of a $\$ 2.1$ billion dividend associated with the Variable Annuities Recapture, which was subsequently contributed to PALAC to support the risks of that business, and a $\$ 900$ million dividend relating to the operations of Prudential Insurance.

International insurance subsidiaries. Capital redeployment from our international insurance subsidiaries is subject to local regulatory requirements in the international jurisdictions in which they operate. Our most significant international insurance subsidiaries, Prudential of Japan and Gibraltar Life, are permitted to pay common stock dividends based on calculations specified by Japanese insurance law, subject to prior notification to the FSA. Dividends in excess of these amounts and other forms of capital distribution require the prior approval of the FSA. In addition to paying common stock dividends, International Insurance operations may return capital to Prudential Financial through other means, such as the repayment of subordinated debt or preferred stock obligations held by Prudential Financial or other affiliates. The current regulatory fiscal year end for both Prudential of Japan and Gibraltar Life is March 31, 2017, after which time the common stock dividend amount permitted to be paid without prior approval from the FSA can be determined.

During 2016, Prudential Financial received a total of $\$ 476$ million from Prudential International Insurance Holdings, the domestic parent of the International Insurance subsidiaries. Of this $\$ 476$ million, $\$ 446$ million is attributable to Prudential Holdings of Japan, Inc. ("PHJ"), the parent of the Company's Japanese operations, and $\$ 30$ million is attributable to Prudential of Korea. During 2016, PHJ received a total of $¥ 98.3$ billion, or $\$ 842$ million at year-end 2016 foreign currency exchange rates, from its subsidiaries, of which a portion was sent to Prudential Financial, as noted above, and $\$ 450$ million was retained at PHJ but remains available to be paid as a dividend to Prudential Financial. PHJ’s cash receipts from subsidiaries include dividends of $¥ 47.4$ billion, or $\$ 406$ million, from Gibraltar Life and Other Japan Operations and $¥ 10.6$ billion, or $\$ 91$ million, from Prudential of Japan. PHJ also received $¥ 40.2$ billion, or $\$ 345$ million, from Gibraltar Life, primarily as repayment of subordinated debt.

Other subsidiaries. The ability of our asset management subsidiaries and the majority of our other operating subsidiaries to pay dividends is largely unrestricted from a regulatory standpoint.

## Liquidity of Insurance Subsidiaries

We manage the liquidity of our insurance operations to ensure stable, reliable and cost-effective sources of cash flows to meet all of our obligations. Liquidity within each of our insurance subsidiaries is provided by a variety of sources, including portfolios of liquid assets. The investment portfolios of our subsidiaries are integral to the overall liquidity of our insurance operations. We segment our investment portfolios and employ an asset/liability management approach specific to the requirements of each of our product lines. This enhances the discipline applied in managing the liquidity, as well as the interest rate and credit risk profiles, of each portfolio in a manner consistent with the unique characteristics of the product liabilities.

Liquidity is measured against internally-developed benchmarks that take into account the characteristics of both the asset portfolio and the liabilities that they support. We consider attributes of the various categories of liquid assets (for example, type of asset and credit quality) in calculating internal liquidity measures to evaluate our insurance operations' liquidity under various stress scenarios, including company-specific and market-wide events. We continue to believe that cash generated by ongoing operations and the liquidity profile of our assets provide sufficient liquidity under reasonably foreseeable stress scenarios for each of our insurance subsidiaries.

## Cash Flow

The principal sources of liquidity for our insurance subsidiaries are premiums, investment and fee income, and investment maturities and sales associated with our insurance and annuity operations, as well as internal and external borrowings. The principal uses of that liquidity include benefits, claims and dividends paid to policyholders, and payments to policyholders and contractholders in connection with surrenders, withdrawals and net policy loan activity. Other uses of liquidity include commissions, general and administrative expenses, purchases of investments, the payment of dividends to the parent holding company, hedging activity and payments in connection with financing activities.

In each of our major insurance subsidiaries, we believe that the cash flows from operations are adequate to satisfy current liquidity requirements. The continued adequacy of this liquidity will depend upon factors such as future securities market conditions, changes in interest rate levels, policyholder perceptions of our financial strength, policyholder behavior, catastrophic events and the relative safety and attractiveness of competing products, each of which could lead to reduced cash inflows or increased cash outflows. Our insurance operations' cash flows from investment activities result from repayments of principal, proceeds from maturities and sales of invested assets and investment income, net of amounts reinvested. The primary liquidity risks with respect to these cash flows are the risk of default by debtors or bond insurers, our counterparties' willingness to extend repurchase and/or securities lending arrangements, commitments to invest and market volatility. We closely manage these risks through our credit risk management process and regular monitoring of our liquidity position.

Domestic insurance operations. In managing the liquidity of our domestic insurance operations, we consider the risk of policyholder and contractholder withdrawals of funds earlier than our assumptions when selecting assets to support these contractual obligations. We use surrender charges and other contract provisions to mitigate the extent, timing and profitability impact of withdrawals of funds by customers. The following table sets forth the liabilities for future policy benefits and policyholders' account balances of certain of our domestic insurance subsidiaries as of the dates indicated.

|  | Decem | er 31, |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in bil |  |
| Prudential Insurance | \$190.5 | \$172.0 |
| PLIC | 53.7 | 54.0 |
| Pruco Life | 35.4 | 32.4 |
| PRIAC | 26.4 | 25.3 |
| PALAC | 13.4 | 6.0 |
| Other(1) | (83.2) | (62.6) |
| Total future policy benefits and policyholders' account balances(2) | \$236.2 | \$227.1 |

(1) Includes the impact of intercompany eliminations.
(2) Amounts are reflected gross of affiliated reinsurance recoverables.

The liabilities presented above are primarily supported by invested assets in our general account. As noted above, when selecting assets to support these contractual obligations, we consider the risk of policyholder and contractholder withdrawals of funds earlier than our assumptions. As a result, assets will include both liquid assets, as discussed below, and other assets that we believe adequately support our liabilities.

For Prudential Insurance and other subsidiaries, the liabilities presented above primarily include annuity reserves and deposit liabilities and individual life insurance policy reserves. Individual life insurance policies may impose surrender charges and policyholders may be subject to a new underwriting process in order to obtain a new insurance policy. Prudential Insurance's reserves for group annuity contracts primarily relate to pension risk transfer contracts, which are generally not subject to early withdrawal. For our individual annuity contracts, to encourage persistency, most of our variable and fixed annuities have surrender or withdrawal charges for a specified number of years. In addition, certain fixed annuities impose a market value adjustment if the invested amount is not held to maturity. The living benefit features of our variable annuities also encourage persistency because the potential value of the living benefit is fully realized only if the contract persists.

For PRIAC, the liabilities presented above primarily include reserves for stable value contracts. Although many of these contracts are subject to discretionary withdrawal, withdrawals are typically at the market value of the underlying assets. Risk is further reduced by the high persistency of clients driven in part by our competitive position in our target markets and contractual provisions such as deferred payouts.

Gross account withdrawals for our domestic insurance operations' products in 2016 were generally consistent with our assumptions in asset/liability management, and the associated cash outflows did not have a material adverse impact on our overall liquidity.

International insurance operations. As with our domestic operations, in managing the liquidity of our international insurance operations, we consider the risk of policyholder and contractholder withdrawals of funds earlier than our assumptions in selecting assets to support these contractual obligations. The following table sets forth the liabilities for future policy benefits and policyholders' account balances of certain of our international insurance subsidiaries as of the dates indicated.

|  | Decen | er 31, |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in b | ions) |
| Prudential of Japan(1) | \$ 42.0 | \$ 37.4 |
| Gibraltar Life(2) | 95.2 | 84.3 |
| All other international insurance subsidiaries(3) | 12.7 | 12.4 |
| Total future policy benefits and policyholders' account balances(4) | \$149.9 | \$134.1 |

(1) As of December 31, 2016 and 2015, $\$ 10.3$ billion and $\$ 9.1$ billion, respectively, of the insurance-related liabilities for Prudential of Japan are associated with U.S. dollar-denominated products that are coinsured to our domestic insurance operations and supported by U.S. dollar-denominated assets.
(2) Includes PGFL, a subsidiary of Gibraltar Life.
(3) Represents our international insurance operations, excluding Japan.
(4) Amounts are reflected gross of affiliated reinsurance recoverables.

The liabilities presented above are primarily supported by invested assets in our general account. When selecting assets to support these contractual obligations, we consider the risk of policyholder and contractholder withdrawals of funds earlier than our assumptions. As a result, assets will include both liquid assets, as discussed below, and other assets that we believe adequately support our liabilities.

We believe most of the longer-term recurring pay individual life insurance policies sold by our Japanese operations do not have significant withdrawal risk because policyholders may incur surrender charges and must undergo a new underwriting process to obtain a new insurance policy.

Gibraltar Life sells fixed annuities, denominated in U.S. and Australian dollars that may be subject to increased surrenders should the yen depreciate in relation to these currencies and interest rates in Australia and the U.S. decline relative to Japan. A significant portion of the liabilities associated with these contracts include a market value adjustment feature, which mitigates the profitability impact from surrenders. As of December 31, 2016, products with a market value adjustment feature represented $\$ 23.3$ billion of our Japan operations' insurance-related liabilities, which included $\$ 19.1$ billion attributable to non-yen denominated fixed annuities.

## Liquid Assets

Liquid assets include cash and cash equivalents, short-term investments, U.S. Treasury fixed maturities, fixed maturities that are not designated as held-to-maturity and public equity securities. In addition to access to substantial investment portfolios, our insurance companies' liquidity is managed through access to a variety of instruments available for funding and/or managing cash flow mismatches, including from time to time those arising from claim levels in excess of projections. Our ability to utilize assets and liquidity between our subsidiaries is limited by regulatory and other constraints. We believe that ongoing operations and the liquidity profile of our assets provide sufficient liquidity under reasonably foreseeable stress scenarios for each of our insurance subsidiaries.

The following table sets forth the fair value of certain of our domestic insurance operations' portfolio of liquid assets, including cash and short-term investments, fixed maturity investments other than those designated as held-to-maturity, classified by NAIC or equivalent rating, and public equity securities, as of the dates indicated.

|  | December 31, 2016 |  |  |  |  |  | $\begin{gathered} \text { December 31, } \\ 2015 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prudential Insurance | PLIC | PRIAC | PALAC | Pruco Life | Total |  |
|  | (in billions) |  |  |  |  |  |  |
| Cash and short-term investments | \$ 6.5 | \$ 2.1 | \$ 0.7 | \$ 3.0 | \$0.1 | \$ 12.4 | \$ 10.3 |
| Fixed maturity investments(1): |  |  |  |  |  |  |  |
| High or highest quality | 97.6 | 33.4 | 19.4 | 9.1 | 5.2 | 164.7 | 147.5 |
| Other than high or highest quality | 7.0 | 3.6 | 1.7 | 0.5 | 0.4 | 13.2 | 12.3 |
| Subtotal | 104.6 | 37.0 | 21.1 | 9.6 | 5.6 | 177.9 | 159.8 |
| Public equity securities | 0.3 | 2.7 | 0.0 | 0.0 | 0.0 | 3.0 | 3.2 |
| Total | \$111.4 | \$41.8 | \$21.8 | \$12.6 | \$5.7 | \$193.3 | \$173.3 |

(1) Excludes fixed maturities designated as held-to-maturity. Classified by NAIC or equivalent rating.

The following table sets forth the fair value of our international insurance operations' portfolio of liquid assets, including cash and short-term investments, fixed maturity investments other than those designated as held-to-maturity, classified by NAIC or equivalent rating, and public equity securities, as of the dates indicated.

|  | December 31, 2016 |  |  |  | $\underset{2015}{\text { December 31, }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prudential of Japan | Gibraltar Life(1) | $\begin{gathered} \text { All } \\ \text { Other }(2) \end{gathered}$ | Total |  |
|  |  |  | (in billions) |  |  |
| Cash and short-term investments | \$ 0.9 | \$ 2.1 | \$ 2.4 |  | \$ 3.5 |
| Fixed maturity investments(3): |  |  |  |  |  |
| High or highest quality(4) | 33.7 | 88.2 | 15.9 | 137.8 | 123.8 |
| Other than high or highest quality | 0.8 | 2.4 | 1.1 | 4.3 | 3.3 |
| Subtotal | 34.5 | 90.6 | 17.0 | 142.1 | 127.1 |
| Public equity securities | 1.8 | 2.3 | 0.7 | 4.8 | 4.6 |
| Total | \$37.2 | \$95.0 | \$20.1 | \$152.3 | \$135.2 |

(1) Includes PGFL, a subsidiary of Gibraltar Life.
(2) Represents our international insurance operations, excluding Japan.
(3) Excludes fixed maturities designated as held-to-maturity. Classified by NAIC or equivalent rating.
(4) As of December 31, 2016, $\$ 98.0$ billion, or $71 \%$, were invested in government or government agency bonds.

Given the size and liquidity profile of our investment portfolios, we believe that claim experience, including policyholder withdrawals and surrenders, varying from our projections does not constitute a significant liquidity risk. Our asset/liability management process takes into account the expected maturity of investments and expected claim payments as well as the specific nature and risk profile of the liabilities. To the extent we need to pay claims in excess of projections, we may borrow temporarily or sell investments sooner than anticipated to pay these claims, which may result in increased borrowing costs or realized investment gains or losses, including from changes in interest rates or credit spreads. The payment of claims and sale of investments earlier than anticipated would have an impact on the reported level of cash flow from operating, investing, and financing activities, in our financial statements. Historically, there has been no significant variation between the expected maturities of our investments and the payment of claims.

## Liquidity associated with other activities

## Hedging activities associated with living benefit guarantees

For the portion of our Individual Annuities' risk management strategy executed through hedging, we enter into a range of exchangetraded, cleared and other OTC equity and interest rate derivatives in order to hedge certain capital market risks related to more severe
market conditions. For a full discussion of our Individual Annuities' risk management strategy, see "-Results of Operations by SegmentU.S. Retirement Solutions and Investment Management Division—Individual Annuities." This portion of our Individual Annuities' risk management strategy requires access to liquidity to meet payment obligations relating to these derivatives, such as payments for periodic settlements, purchases, maturities and terminations. These liquidity needs can vary materially due to, among other items, changes in interest rates, equity markets, mortality and policyholder behavior. Through March 31, 2016, this hedging portion of our risk management strategy was executed in Pruco Re. Effective April 1, 2016, following the Variable Annuities Recapture, this hedging portion of our risk management strategy resides in certain of our domestic life insurance subsidiaries. Future liquidity needs may be funded with available resources within these subsidiaries and from other resources of Prudential Financial and its affiliates.

The hedging portion of our Individual Annuities' risk management strategy may also result in collateral postings on derivatives to or from counterparties. The net collateral position depends on changes in interest rates and equity markets related to the amount of the exposures hedged. Depending on market conditions, the collateral posting requirements can result in material liquidity needs.

As of December 31, 2016, the living benefit hedging derivatives were in a net receive position of $\$ 3.1$ billion compared to a net receive position of $\$ 4.8$ billion as of December 31, 2015. The change in collateral position was primarily driven by an increase in interest rates, partially offset by the inclusion of collateral from certain of our domestic statutory life insurance entities as a result of the Variable Annuities Recapture.

## Foreign exchange hedging activities

We employ various hedging strategies to manage potential exposure to foreign currency exchange rate movements, particularly those associated with the yen. Our overall yen hedging strategy calibrates the hedge level to preserve the relative contribution of our yen-based business to the Company's overall return on equity on a leverage neutral basis. The hedging strategy includes two primary components:

- Income Hedges-We hedge a portion of our prospective yen-based earnings streams by entering into external forward currency derivative contracts that effectively fix the currency exchange rates for that portion of earnings, thereby reducing volatility from foreign currency exchange rate movements. As of December 31, 2016, we have hedged $100 \%, 73 \%$ and $28 \%$ of expected yen-based earnings for 2017, 2018 and 2019, respectively.
- Equity Hedges-We hold both internal and external hedges primarily to hedge our U.S. dollar-equivalent equity. These hedges also mitigate volatility in the solvency margins of yen-based subsidiaries resulting from changes in the market value of their U.S. dollardenominated investments hedging our U.S. dollar-equivalent equity attributable to changes in the yen-U.S. dollar exchange rate.

For additional information on our hedging strategy, see "—Results of Operations by Segment-International Insurance Division."
Cash settlements from these hedging activities result in cash flows between subsidiaries of Prudential Financial and either international-based subsidiaries or external parties. The cash flows are dependent on changes in foreign currency exchange rates and the notional amount of the exposures hedged. For example, a significant yen depreciation over an extended period of time could result in net cash inflows, while a significant yen appreciation could result in net cash outflows. The following tables set forth information about net cash settlements and the net asset or liability resulting from these hedging activities related to the yen and other currencies:

| Cash Settlements: | Year ended December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Income Hedges (External)(1) | \$ 38 | \$ 286 |
| Equity Hedges: |  |  |
| Internal(2) | (57) | 1,061 |
| External | 652 | (84) |
| Total Equity Hedges | \$595 | \$ 977 |
| Total Cash Settlements | \$633 | \$1,263 |
|  | As of December 31, |  |
| Assets (Liabilities): | 2016 | 2015 |
|  | (in millions) |  |
| Income Hedges (External)(3) | \$ 85 | \$ 162 |
| Equity Hedges: |  |  |
| Internal(2) | 802 | 964 |
| External | 32 | 699 |
| Total Equity Hedges(4) | \$834 | \$1,663 |
| Total Assets (Liabilities) | \$919 | \$1,825 |

(1) Includes non-yen related cash settlements of $\$ 17$ million and $\$ 5$ million for the year ended December 31, 2016 and 2015, respectively, both of which are primarily denominated in Korean won.
(2) Represents internal transactions between international-based and U.S.-based entities. Amounts noted are from the U.S.-based entities' perspectives.
(3) Includes non-yen related assets of $\$ 41$ million and $\$ 29$ million as of December 31, 2016 and 2015, respectively, both of which are primarily denominated in Korean won.
(4) As of December 31, 2016, approximately $\$(186)$ million, $\$ 364$ million and $\$ 657$ million of the net market value is scheduled to settle in 2017, 2018, and thereafter, respectively. The net market value of the assets (liabilities) will vary with changing market conditions to the extent there are no corresponding offsetting positions.

## Asset Management operations

The principal sources of liquidity for our fee-based asset management businesses include asset management fees and commercial mortgage origination and servicing fees. The principal uses of liquidity include general and administrative expenses and distributions of dividends and returns of capital to Prudential Financial. The primary liquidity risks for our fee-based asset management businesses relate to their profitability, which is impacted by market conditions and our investment management performance. We believe the cash flows from our fee-based asset management businesses are adequate to satisfy the current liquidity requirements of these operations, as well as requirements that could arise under reasonably foreseeable stress scenarios, which are monitored through the use of internal measures.

The principal sources of liquidity for our strategic investments held in our asset management businesses are cash flows from investments, the ability to liquidate investments, and available borrowing lines from internal sources, including Prudential Financial and Prudential Funding, LLC ("Prudential Funding"), a wholly-owned subsidiary of Prudential Insurance. The primary liquidity risks include the inability to sell assets in a timely manner, declines in the value of assets and credit defaults. There were no material changes to the liquidity position of our asset management operations during 2016.

## Alternative Sources of Liquidity

In addition to the sources of liquidity discussed above, and asset-based financing as discussed below, Prudential Financial and certain subsidiaries have access to other sources of liquidity, including membership in the Federal Home Loan Banks, commercial paper programs, and a put option agreement. The Company also maintains syndicated, unsecured committed credit facilities as an alternative source of liquidity. In September 2016, PHJ, a wholly-owned subsidiary of Prudential Financial, entered into a $¥ 100$ billion three-year syndicated, unsecured committed credit facility. See Note 14 to our Consolidated Financial Statements for more information on these sources of liquidity.

## Asset-based Financing

We conduct asset-based or secured financing within our insurance and other subsidiaries, including transactions such as securities lending, repurchase agreements and mortgage dollar rolls, to earn spread income, to borrow funds, or to facilitate trading activity. These programs are primarily driven by portfolio holdings of securities that are lendable based on counterparty demand for these securities in the marketplace. The collateral received in connection with these programs is primarily used to purchase securities in the short-term spread portfolios of our insurance entities. Investments held in the short-term spread portfolios include cash and cash equivalents, short-term investments, mortgage loans and fixed maturities, including mortgage-and asset-backed securities, with a weighted average life at time of purchase by the short-term portfolios of four years or less. Floating rate assets comprise the majority of our short-term spread portfolio. These short-term portfolios are subject to specific investment policy statements, which among other things, do not allow for significant asset/liability interest rate duration mismatch.

The following table sets forth our liabilities under asset-based or secured financing programs as of the dates indicated.

|  | December 31, 2016 |  |  | December 31, 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PFI <br> Excluding <br> Closed Block <br> Division | Closed Block Division | Consolidated | PFI Excluding Closed Block Division | Closed Block Division | Consolidated |
|  | (\$ in millions) |  |  |  |  |  |
| Securities sold under agreements to repurchase | \$4,906 | \$2,700 | \$ 7,606 | \$5,421 | \$2,461 | \$ 7,882 |
| Cash collateral for loaned securities | 3,057 | 1,276 | 4,333 | 2,095 | 1,401 | 3,496 |
| Securities sold but not yet purchased | 2 | 0 | 2 | 2 | 0 | 2 |
| Total(1) | \$7,965 | \$3,976 | \$11,941 | \$7,518 | \$3,862 | \$11,380 |
| Portion of above securities that may be returned to the Company overnight requiring immediate return of the cash |  |  |  |  |  |  |
| Company overnight requiring immediate return of the cash collateral(2) | \$3,583 | \$1,631 | \$ 5,214 | \$5,574 | \$2,117 | \$ 7,691 |
| Weighted average maturity, in days(3) | 9 | 6 |  | 8 | 17 |  |

(1) The daily weighted average outstanding balance for the year ended December 31, 2016 and 2015 was $\$ 8,436$ million and $\$ 8,221$ million, respectively, for PFI excluding the Closed Block division, and $\$ 4,249$ million and $\$ 4,755$ million, respectively, for the Closed Block division.
(2) Amount for PFI excluding the Closed Block division as of December 31, 2015 includes $\$ 2,256$ million of securities that had a term greater than one day due to the timing of the January 1, 2016 holiday.
(3) Excludes securities that may be returned to the Company overnight.

As of December 31, 2016, our domestic insurance entities had assets eligible for the asset-based or secured financing programs of $\$ 110.0$ billion, of which $\$ 11.9$ billion were on loan. Taking into account market conditions and outstanding loan balances as of December 31, 2016, we believe approximately $\$ 16.6$ billion of the remaining eligible assets are readily lendable, including approximately $\$ 12.7$ billion relating to PFI excluding the Closed Block division, of which $\$ 3.2$ billion relates to certain separate accounts and may only be used for financing activities related to those accounts, and the remaining $\$ 3.9$ billion relating to the Closed Block division.

## Financing Activities

As of December 31, 2016 and 2015, total short-term and long-term debt of the Company on a consolidated basis was $\$ 19.2$ billion and $\$ 20.8$ billion, respectively. We may, from time to time, seek to redeem or repurchase our outstanding debt securities through open market
purchases, individually negotiated transactions or otherwise. Any such repurchases will depend on prevailing market conditions, our liquidity position and other factors. The following table sets forth total consolidated borrowings of the Company as of the dates indicated.

|  | December 31, 2016 |  |  | December 31, 2015 (1) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prudential Financial | $\underline{\text { Subsidiaries }}$ | Consolidated | Prudential Financial | $\underline{\text { Subsidiaries }}$ | Consolidated |
|  | (in millions) |  |  |  |  |  |
| General obligation short-term debt: |  |  |  |  |  |  |
| Commercial paper | \$ 65 | \$ 525 | \$ 590 | \$ 80 | \$ 384 | \$ 464 |
| Current portion of long-term debt | 470 | 0 | 470 | 751 | 1 | 752 |
| Subtotal | 535 | 525 | 1,060 | 831 | 385 | 1,216 |
| General obligation long-term debt: |  |  |  |  |  |  |
| Senior debt | 9,572 | 727 | 10,299 | 10,543 | 1,323 | 11,866 |
| Junior subordinated debt | 5,817 | 0 | 5,817 | 5,811 | 0 | 5,811 |
| Surplus notes(2) | 0 | 1,339 | 1,339 | 0 | 1,352 | 1,352 |
| Subtotal | 15,389 | 2,066 | 17,455 | 16,354 | 2,675 | 19,029 |
| Total general obligations | 15,924 | 2,591 | 18,515 | 17,185 | 3,060 | 20,245 |
| Limited and non-recourse borrowings(3) |  |  |  |  |  |  |
| Current portion of long-term debt | 0 | 73 | 73 | 0 | 0 | 0 |
| Long-term debt . | 0 | 586 | 586 | 0 | 565 | 565 |
| Subtotal | 0 | 659 | 659 | 0 | 565 | 565 |
| Total borrowings | \$15,924 | \$3,250 | \$19,174 | \$17,185 | \$3,625 | \$20,810 |

(1) Prior period has been revised to conform to current period presentation due to the adoption of ASU 2015-03 regarding the classification of debt issuance costs. For more information, see Note 2 to the Consolidated Financial Statements.
(2) Amounts are net of assets under set-off arrangements of $\$ 5,859$ million and $\$ 4,889$ million, as of December 31, 2016 and 2015, respectively.
(3) Limited and non-recourse borrowing represents mortgage debt of our subsidiaries that has recourse only to real estate investment property.

As of December 31, 2016 and 2015, we were in compliance with all debt covenants related to the borrowings in the table above. For further information on our short-and long-term debt obligations, see Note 14 to our Consolidated Financial Statements.

Based on the use of proceeds, we classify our borrowings as capital debt, investment-related debt, and debt related to specified businesses. Capital debt, which is debt utilized to meet the capital requirements of our businesses, was $\$ 11.6$ billion and $\$ 11.9$ billion as of December 31, 2016 and 2015, respectively. Investment-related debt of $\$ 5.4$ billion and $\$ 7.0$ billion as of December 31, 2016 and 2015, respectively, consists of debt issued to finance specific investment assets or portfolios of investment assets, the proceeds from which will service the debt. Specifically, this includes institutional spread lending investment portfolios, assets supporting reserve requirements under Regulation XXX and Guideline AXXX as described below, as well as funding for institutional and insurance company portfolio cash flow timing differences. Our remaining borrowings are utilized for business funding to meet specific purposes, including funding new business acquisition costs associated with our individual annuities business, operating needs associated with hedging our individual annuities products as discussed above and activities associated with our asset management business.

## Prudential Financial Borrowings

Long-term borrowings are conducted primarily by Prudential Financial. It borrows these funds to meet its capital and other funding needs, as well as the capital and funding needs of its subsidiaries. Prudential Financial maintains a shelf registration statement with the SEC that permits the issuance of public debt, equity and hybrid securities. As a "Well-Known Seasoned Issuer" under SEC rules, Prudential Financial's shelf registration statement provides for automatic effectiveness upon filing and has no stated issuance capacity.

Prudential Financial's borrowings decreased $\$ 1,261$ million from December 31, 2015, driven primarily by maturities of $\$ 750$ million of senior debt and our repurchase of $\$ 500$ million of senior debt through a tender offer. For more information on long-term debt, see Note 14 to the Consolidated Financial Statements.

## Subsidiary Borrowings

Subsidiary borrowings principally consist of surplus note issuances by our insurance and captive reinsurance subsidiaries, commercial paper borrowings by Prudential Funding, asset-based financing and real estate investment financing. Borrowings of our subsidiaries decreased $\$ 375$ million from December 31, 2015, primarily driven by prepayments of $\$ 600$ million of senior debt, offset by a $\$ 141$ million increase in commercial paper outstanding and the issuance of $\$ 113$ million of mortgage debt.

## Term and Universal Life reserve financing

Regulation XXX and Guideline AXXX require domestic life insurers to establish statutory reserves for term and universal life insurance policies with long-term premium guarantees that are consistent with the statutory reserves required for other individual life policies with similar guarantees. Many market participants believe that these levels of reserves are excessive relative to the levels reasonably required to maintain solvency for moderately adverse experience. The difference between the statutory reserve and the amount necessary to maintain solvency for moderately adverse experience is considered to be the non-economic portion of the statutory reserve.

We use captive reinsurance subsidiaries to finance the portion of the statutory reserves that we consider to be non-economic. The financing arrangements involve the reinsurance of term and universal life business to our captive reinsurers and the issuance of surplus notes by those captives that are treated as capital for statutory purposes. These surplus notes are subordinated to policyholder obligations, and the payment of principal on the surplus notes may only be made with prior insurance regulatory approval.

To date, we have entered into agreements with external counterparties providing for the issuance of up to an aggregate of $\$ 9,150$ million of surplus notes by our captive reinsurers in return for the receipt of credit-linked notes ("Credit-Linked Note Structures"), of which $\$ 7,759$ million of surplus notes was outstanding as of December 31, 2016. Under the agreements, the captive receives in exchange for the surplus notes one or more credit-linked notes issued by a special-purpose affiliate of the Company with an aggregate principal amount equal to the surplus notes outstanding. The captive holds the credit-linked notes as assets supporting Regulation XXX or Guideline AXXX non-economic reserves, as applicable. The captive can redeem the principal amount of the outstanding credit-linked notes for cash upon the occurrence of, and in an amount necessary to remedy, a specified liquidity stress event affecting the captive. Under the agreements, the external counterparties have agreed to fund any such payments under the credit-linked notes in return for the receipt of fees. Prudential Financial has agreed to make capital contributions to the captive to reimburse it for investment losses in excess of specified amounts and, under certain of the transactions, Prudential Financial has agreed to reimburse the external counterparties for any payments made under the credit-linked notes. To date, no such payments under the credit-linked notes have been required. Under these transactions, because valid rights of set-off exist, interest and principal payments on the surplus notes and on the credit-linked notes are settled on a net basis, and the surplus notes are reflected in the Company's total consolidated borrowings on a net basis.

The following table summarizes our Credit-Linked Note Structures, which are reported on a net basis, as of December 31, 2016:
Credit-Linked
Note Structures $:$
(1) Prudential Financial has agreed to reimburse any amounts paid under the credit-linked notes issued in this structure.
(2) The $\$ 1.9$ billion of surplus notes represents an intercompany transaction that eliminates upon consolidation. Prudential Financial has agreed to reimburse amounts paid under credit-linked notes issued in this structure up to $\$ 1.0$ billion.

As of December 31, 2016, we also had outstanding an aggregate of $\$ 3.1$ billion of debt issued for the purpose of financing Regulation XXX and Guideline AXXX non-economic reserves, of which approximately $\$ 0.9$ billion relates to Regulation XXX reserves and approximately $\$ 2.2$ billion relates to Guideline AXXX reserves, all of which was issued directly by or guaranteed by Prudential Financial. Under certain of the financing arrangements pursuant to which this debt was issued, Prudential Financial has agreed to make capital contributions to the applicable captive reinsurance subsidiary to reimburse it for investment losses or to maintain its capital above prescribed minimum levels. In addition, as of December 31, 2016, for purposes of financing Guideline AXXX reserves, our captives had outstanding approximately $\$ 4.0$ billion of surplus notes that were issued to affiliates.

The NAIC's actuarial guideline known as "AG 48" requires us to hold cash and rated securities in greater amounts than we previously held to support economic reserves for certain of our term and universal life policies reinsured to a captive. The additional asset requirement as of December 31, 2015, was approximately $\$ 400$ million, and we expect the requirement as of December 31, 2016, to be an additional $\$ 600$ million, for a total additional asset requirement of approximately $\$ 1$ billion. We funded the first $\$ 400$ million using a combination of existing assets and newly purchased assets sourced from affiliated financing, and have funded, or expect to fund, the remaining $\$ 600$ million in the same manner. We believe we have sufficient internal resources to satisfy the additional asset requirement through 2017.

As discussed under "Business-Regulation" included in Prudential Financial's 2016 Annual Report on Form 10-K, in June 2016, the NAIC adopted a recommendation that will activate a principles-based reserving approach for life insurance products. At the Company's discretion, it may be applied to new individual life business beginning as early as January 1, 2017, and must be applied for all new individual life business issued January 1, 2020 and later. During 2017, the Company expects to adopt principles-based reserving for its guaranteed universal life products and to introduce updated versions of these products. The updated products are expected to support the principles-based statutory reserve level without the need for captive reserve financing or additional assets under AG 48. The Company is continuing to assess the impact of this new reserving approach on projected statutory reserve levels and product pricing for its remaining portfolio of individual life product offerings.

## Ratings

Financial strength ratings (which are sometimes referred to as "claims-paying" ratings) and credit ratings are important factors affecting public confidence in an insurer and its competitive position in marketing products. Our credit ratings are also important for our ability to raise capital through the issuance of debt and for the cost of such financing. Nationally Recognized Statistical Ratings Organizations continually review the financial performance and financial condition of the entities they rate, including Prudential Financial and its rated subsidiaries.

A downgrade in the credit or financial strength ratings of Prudential Financial or its rated subsidiaries could potentially, among other things, limit our ability to market products, reduce our competitiveness, increase the number or value of policy surrenders and withdrawals,
increase our borrowing costs and potentially make it more difficult to borrow funds, adversely affect the availability of financial guarantees, such as letters of credit, cause additional collateral requirements or other required payments under certain agreements, allow counterparties to terminate derivative agreements and/or hurt our relationships with creditors, distributors, or trading counterparties thereby potentially negatively affecting our profitability, liquidity, and/or capital. In addition, we consider our own risk of non-performance in determining the fair value of our liabilities. Therefore, changes in our credit or financial strength ratings may affect the fair value of our liabilities.

Financial strength ratings represent the opinions of rating agencies regarding the financial ability of an insurance company to meet its obligations under an insurance policy. Credit ratings represent the opinions of rating agencies regarding an entity's ability to repay its indebtedness. The following table summarizes the ratings for Prudential Financial and certain of its subsidiaries as of February 17, 2017.

|  | A.M. <br> Best(1) | S\&P(2) | Moody's(3) | Fitch(4) |
| :---: | :---: | :---: | :---: | :---: |
| Last review date | 9/2/2016 | 1/26/2017 | 11/11/2015 | 11/15/2016 |
| Current outlook | Stable | Stable | Stable | Negative |
| Financial Strength Ratings: |  |  |  |  |
| The Prudential Insurance Company of America | A+ | AA- | A1 | AA- |
| Pruco Life Insurance Company | A+ | AA- | A1 | AA- |
| Pruco Life Insurance Company of New Jersey | A+ | AA- | NR* | AA- |
| Prudential Annuities Life Assurance Corporation | A+ | AA- | NR | AA- |
| Prudential Retirement Insurance and Annuity Company | A+ | AA- | A1 | AA- |
| The Prudential Life Insurance Company Ltd. (Prudential of Japan) | NR | A+ | NR | NR |
| Gibraltar Life Insurance Company, Ltd. | NR | A+ | NR | NR |
| The Prudential Gibraltar Financial Life Insurance Co. Ltd | NR | A+ | NR | NR |
| Prudential Life Insurance Co. of Taiwan, Inc.(5) | NR | twAA+ | NR | NR |

## Credit Ratings:

Prudential Financial, Inc.:
Short-term borrowing
Long-term senior debt

| AMB-1 | A-1 | P-2 | F1 |
| :---: | :---: | :---: | :---: |
| a- | A | Baa1 | A- |
| bbb | BBB+ | Baa2 | BBB |
| a | A | A3 | A |
| AMB-1 | A-1+ | P-1 | F1+ |
| a+ | AA- | A2 | A+ |
| aa- | AA- | A1 | AA- |

* "NR" indicates not rated.
(1) A.M. Best Company, which we refer to as A.M. Best, financial strength ratings for insurance companies range from "A++ (superior)" to "s (suspended)." A rating of $\mathrm{A}+$ is the second highest of sixteen rating categories. A.M. Best long-term credit ratings range from "aaa (exceptional)" to "s (suspended)." A.M. Best short-term credit ratings range from "AMB-1+," which represents an strongest ability to repay short-term debt obligations, to "s(suspended)."
(2) Standard \& Poor's Rating Services, which we refer to as S\&P, financial strength ratings for insurance companies range from "AAA (extremely strong)" to "D (default)." A rating of AA- is the fourth highest of twenty-three rating categories. S\&P's long-term issue credit ratings range from "AAA (extremely strong)" to "D (default)." S\&P short-term ratings range from "A-1 (highest category)" to "D (default)."
(3) Moody's Investors Service, Inc., which we refer to as Moody's, insurance financial strength ratings range from "Aaa (exceptional)" to "C (lowest)." A rating of A1 is the fifth highest of twenty-one rating categories. Numeric modifiers are used to refer to the ranking within the group-with 1 being the highest and 3 being the lowest. These modifiers are used to indicate relative strength within a category. Moody's credit ratings range from "Aaa (highest)" to "C (default)". Moody's short-term ratings range from "Prime-1 (P-1)," which represents a superior ability for repayment of senior shortterm debt obligations, to "Prime-3 (P-3)," which represents an acceptable ability for repayment of such obligations. Issuers rated "Not Prime" do not fall within any of the Prime rating categories.
(4) Fitch Ratings Inc., which we refer to as Fitch, financial strength ratings range from "AAA (exceptionally strong)" to "C (distressed)." A rating of AA- is the fourth highest of nineteen rating categories. Fitch long-term credit ratings range from "AAA (highest credit quality)," which denotes exceptionally strong capacity for timely payment of financial commitments, to "D (default)." Investment grade ratings range between "AAA" and "BBB." Short-term ratings range from "F1+ (highest credit quality)" to "D (default)."
(5) This rating for Prudential Life Insurance Company of Taiwan, Inc. was affirmed on November 17, 2016 by Taiwan Ratings Corporation, a partner of S\&P.

The ratings set forth above reflect current opinions of each rating agency. Each rating should be evaluated independently of any other rating. These ratings are not directed toward shareholders and do not in any way reflect evaluations of the safety and security of the Common Stock. These ratings are reviewed periodically and may be changed at any time by the rating agencies. As a result, we cannot assure stakeholders that we will maintain our current ratings in the future.

Rating agencies use an "outlook" statement for both industry sectors and individual companies. For an industry sector, a stable outlook generally implies that over the next 12-18 months the rating agency expects ratings to remain unchanged among companies in the sector. This year, Moody's and A.M. Best changed the Rating Outlook on the U.S. life insurance industry to Negative from Stable. Fitch and S\&P continued to keep the life insurance industry on Stable outlook; however, Fitch revised its Sector Outlook for U.S. life insurers to Negative. For a particular company, an outlook generally indicates a medium- or long-term trend (generally six months to two years) in
credit fundamentals, which if continued, may lead to a rating change. These indicators are not necessarily a precursor of a rating change nor do they preclude a rating agency from changing a rating at any time without notice. Currently, Fitch has all the Company's ratings on Stable outlook, except for the financial strength ratings assigned to Prudential Insurance and certain other insurance subsidiaries which are on Negative outlook. Moody's, S\&P, and A.M. Best have all the Company's ratings on Stable outlook.

Requirements to post collateral or make other payments as a result of ratings downgrades under certain agreements, including derivative agreements, can be satisfied in cash or by posting permissible securities held by the subsidiaries subject to the agreements. In addition, a ratings downgrade by A.M. Best to "A-" for our domestic life insurance companies would require Prudential Insurance to either post collateral or a letter of credit in the amount of approximately $\$ 1.5$ billion, based on the level of statutory reserves related to the variable annuity business acquired from Allstate. We believe that the posting of such collateral would not be a material liquidity event for Prudential Insurance.

In view of the difficulties experienced in recent years by many financial institutions, the rating agencies have heightened the level of scrutiny that they apply to such institutions, have increased the frequency and scope of their credit reviews, have requested additional information from the companies that they rate, and may adjust upward the capital and other requirements employed in the rating agency models for maintenance of certain ratings levels, such as the financial strength ratings currently held by our life insurance subsidiaries. In addition, actions we might take to access third-party financing or to realign our capital structure may in turn cause rating agencies to reevaluate our ratings.

The following is a summary of the significant changes or actions in ratings and rating outlooks for our Company, as well as for the life insurance industry and sector, that have occurred from January 1, 2016 through February 17, 2017:

On September 7, 2016, Fitch revised its Sector Outlook for U.S. life insurers to Negative. Fitch's Sector Outlook reflects its view of underlying fundamental trends in the industry and the current operating environment. The revision of the Sector Outlook to Negative is due to macro challenges tied to declining interest rates and market volatility. At the same time, Fitch kept its Rating Outlook, which indicates the direction in which ratings are likely to move over the next 18-24 months, on the U.S. life insurance sector as Stable. The current Stable rating reflects Fitch's view that the impact of the negative fundamentals indicated in their Sector Outlook remain manageable in the context of industry earnings and capital over the outlook period, and Fitch's expectations that key credit metrics will remain largely consistent with current ratings. These indicators are not necessarily a precursor of a rating change nor do they preclude a rating agency from changing a rating at any time without notice.

On November 15, 2016, Fitch upgraded Prudential Financial's long-term senior debt rating to A- from BBB+ with a Stable outlook and the financial strength ratings of our U.S. operating entities to "AA-" from "A+" with a Negative outlook.

On November 15, 2016, Moody's revised its Rating Outlook on the U.S. life insurance industry to Negative. Moody's outlook indicates their expectations for the fundamental credit conditions driving the U.S. life insurance industry over the next 12-18 months. The change in the outlook is a result of increased pressure on life insurers' sales, revenues and profitability due to persistent low interest rates and weak economic growth, together with regulatory pressures on product distribution. The change in outlook back to Stable from Negative can occur with a gradual, steady increase in long-term interest rates in 2017, underpinned by strong equity market levels and an improvement in economic growth.

On December 7, 2016, A.M. Best revised its Rating Outlook on the U.S. life insurance industry to Negative. The revision of the Rating Outlook to Negative reflects A.M. Best's view that the industry is entering into a period of increased volatility across both economic and regulatory fronts. A.M. Best's outlook indicates that there is uncertainty around the slow premium growth for life and other products, disruption from merger and acquisition activity, and the industry's historic slow incremental approach in the face of a rapidly changing landscape.

## Contractual Obligations

The table below summarizes the future estimated cash payments related to certain contractual obligations as of December 31, 2016. The estimated payments reflected in this table are based on management's estimates and assumptions about these obligations. Because these estimates and assumptions are necessarily subjective, the actual cash outflows in future periods will vary, possibly materially, from those reflected in the table. In addition, we do not believe that our cash flow requirements can be adequately assessed based solely upon an analysis of these obligations, as the table below does not contemplate all aspects of our cash inflows, such as the level of cash flow generated by certain of our investments, nor all aspects of our cash outflows.

|  | Estimated Payments Due by Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 2017 | 2018-2019 | 2020-2021 | 2022 and thereafter |
|  |  |  | (in millions) |  |  |
| Short-term and long-term debt obligations(1) | \$ 38,931 | \$ 2,097 | \$ 4,811 | \$ 3,361 | \$ 28,662 |
| Operating and capital lease obligations(2) | 718 | 150 | 235 | 148 | 185 |
| Purchase obligations: |  |  |  |  |  |
| Commitments to purchase or fund investments(3) | 6,376 | 5,486 | 533 | 212 | 145 |
| Commercial mortgage loan commitments(4) | 1,984 | 1,643 | 327 | 0 | 14 |
| Other liabilities: |  |  |  |  |  |
| Insurance liabilities(5) | 1,124,645 | 44,024 | 69,170 | 72,569 | 938,882 |
| Other(6) | 12,157 | 11,966 | 85 | 53 | 53 |
| Total | \$1,184,811 | \$65,366 | \$75,161 | \$76,343 | \$967,941 |

(1) The estimated payments due by period for long-term debt reflects the contractual maturities of principal, as disclosed in Note 14 to the Consolidated Financial Statements, as well as estimated future interest payments. The payment of principal and estimated future interest for short-term debt are
reflected in estimated payments due in 2017. The estimate for future interest payments includes the effect of derivatives that qualify for hedge accounting treatment. See Note 14 to the Consolidated Financial Statements for additional information concerning our short-term and long-term debt.
(2) The estimated payments due by period for operating and capital leases reflect the future minimum lease payments under non-cancelable operating and capital leases, as disclosed in Note 23 to the Consolidated Financial Statements.
(3) As discussed in Note 23 to the Consolidated Financial Statements, we have commitments to purchase or fund investments, some of which are contingent upon events or circumstances not under our control, including those at the discretion of our counterparties. The timing of the fulfillment of certain of these commitments cannot be estimated, therefore the settlement of these obligations are reflected in estimated payments due in less than one year. Commitments to purchase or fund investments include $\$ 374$ million that we anticipate will ultimately be funded from our separate accounts.
(4) As discussed in Note 23 to the Consolidated Financial Statements, loan commitments of our commercial mortgage operations, which are legally binding commitments to extend credit to a counterparty, have been reflected in the contractual obligations table above principally based on the expiration date of the commitment; however, it is possible these loan commitments could be funded prior to their expiration date. In certain circumstances the counterparty may also extend the date of the expiration in exchange for a fee.
(5) The estimated cash flows due by period for insurance liabilities reflect future estimated cash payments to be made to policyholders and others for future policy benefits, policyholders' account balances, policyholder's dividends, reinsurance payables and separate account liabilities, net of premium receipts and reinsurance recoverables. These future estimated cash flows for current policies in force generally reflect our best estimate economic and actuarial assumptions. These cash flows are undiscounted with respect to interest. The sum of the cash flows shown for all years in the table of $\$ 1,125$ billion exceeds the corresponding liability amounts of approximately $\$ 682$ billion included in the Consolidated Financial Statements as of December $31,2016$. Separate account liabilities are legally insulated from general account obligations, and it is generally expected these liabilities will be fully funded by separate account assets and their related cash flows. We have made significant assumptions to determine the future estimated cash flows related to the underlying policies and contracts. Due to the significance of the assumptions used, actual cash flows will differ, possibly materially, from these estimates.
(6) The estimated payments due by period for other liabilities includes securities sold under agreements to repurchase, cash collateral for loaned securities, liabilities for unrecognized tax benefits, bank customer liabilities, and other miscellaneous liabilities. Amounts presented in the table also exclude $\$ 2,150$ billion of notes issued by consolidated VIE's which recourse for these obligations is limited to the assets of the respective VIE and do not have recourse to the general credit of the company.

We also enter into agreements to purchase goods and services in the normal course of business; however, these purchase obligations are not material to our consolidated results of operations or financial position as of December 31, 2016.

## Off-Balance Sheet Arrangements

## Guarantees and Other Contingencies

In the course of our business, we provide certain guarantees and indemnities to third parties pursuant to which we may be contingently required to make payments in the future. See "Commitments and Guarantees" within Note 23 to the Consolidated Financial Statements for additional information.

## Other Contingent Commitments

We also have other commitments, some of which are contingent upon events or circumstances not under our control, including those at the discretion of our counterparties. See "Commitments and Guarantees" within Note 23 to the Consolidated Financial Statements for additional information regarding these commitments. For further discussion of certain of these commitments that relate to our separate accounts, also see "-Liquidity associated with other activities-Asset Management operations."

## Other Off-Balance Sheet Arrangements

In November 2013, we entered into a put option agreement with a Delaware trust that gives Prudential Financial the right, at any time over a ten-year period, to issue up to $\$ 1.5$ billion of senior notes to the trust in return for principal and interest strips of U.S. Treasury securities that are held by the trust. See Note 14 to our Consolidated Financial Statements for more information on this put option agreement. In 2014, Prudential Financial entered into financing transactions, pursuant to which it issued $\$ 500$ million of limited recourse notes and, in return, obtained $\$ 500$ million of asset-backed notes from a Delaware master trust and ultimately contributed the asset-backed notes to its subsidiary, PRIAC. As of December 31, 2016, no principal payments have been received or are currently due on the assetbacked notes and, as a result, there was no payment obligation under the limited recourse notes. Accordingly, none of the notes are reflected in the Company's Consolidated Financial Statements as of that date.

Other than as described above, we do not have retained or contingent interests in assets transferred to unconsolidated entities, or variable interests in unconsolidated entities or other similar transactions, arrangements or relationships that serve as credit, liquidity or market risk support, that we believe are reasonably likely to have a material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or our access to or requirements for capital resources. In addition, other than the agreements referred to above, we do not have relationships with any unconsolidated entities that are contractually limited to narrow activities that facilitate our transfer of or access to associated assets.

## Risk Management

## Overview

We employ a risk governance structure, overseen by senior management and our Board of Directors and managed by Enterprise Risk Management ("ERM"), to provide a common framework for evaluating the risks embedded in and across our businesses, developing risk appetites, managing these risks and identifying current and future risk challenges and opportunities.

## Risk Governance Framework

Each of our businesses has a risk governance structure that is supported by a framework at the corporate-level. Generally, our businesses are authorized to make day-to-day risk decisions that are consistent with enterprise risk policies and limits, and subject to enterprise oversight. The governance structure described in this section is designed to support this framework.

## Board of Directors' Role in Risk Management

Our Board of Directors oversees our risk profile and management's processes for assessing and managing risk. Certain specific categories of risk are assigned to Board committees that report back to the full Board, as summarized below:

- Audit Committee: oversees risks related to operational risks, financial controls, legal, regulatory and compliance risks, and the overall risk management governance structure and risk management function.
- Finance Committee: oversees risks involving our capital and liquidity management, the incurrence and repayment of borrowings, the capital structure, the funding of benefit plans and statutory insurance reserves. It also oversees the strength of the finance function. The Finance Committee reviews and recommends for approval to the Board our capital plan. The Finance Committee also receives regular updates on the sources and uses of capital relative to plan, as well as on our Capital Protection Framework.
- Investment Committee: oversees investment and market risk and the strength of the investment function. The Investment Committee approves investment and market risk limits for Prudential Financial and for Prudential Insurance's general account based on asset class, issuer, credit quality and geography.
- Compensation Committee: oversees our compensation programs so that incentives are aligned with appropriate risk taking.
- Corporate Governance and Business Ethics Committee: oversees our political contributions, lobbying expenses and overall political strategy, as well as our environmental, sustainability and corporate social responsibility.
- Risk Committee: oversees the governance of significant risks throughout the Company and the establishment and ongoing monitoring of our risk profile, risk capacity and risk appetite. The Risk Committee also serves to coordinate the risk oversight functions of the other committees of the Board.


## Management Committees

Our primary risk management committee is the Enterprise Risk Committee ("ERC"). The ERC is chaired by our Chief Risk Officer and otherwise comprised of the Vice Chairman, Chief Operating Officers for the U.S. and International Businesses, General Counsel, Chief Financial Officer, Chief Investment Officer and Chief Actuary. Our Chief Auditor also attends meetings of the ERC. The ERC's mandate is to review significant risks that impact us and approve, or recommend to the Board for approval, our risk management policies and limits to keep our risk profile consistent with our strategy.

The ERC is supported by five Risk Oversight Committees, each of which is comprised of subject matter experts and dedicated to one of the following risk types: investment risk, market risk, insurance risk, operational risk and model risk. These Risk Oversight Committees report their activities to the ERC, and significant matters or matters where there are unresolved points of view are reviewed and brought to the ERC. The Risk Oversight Committees provide an opportunity to evaluate complex issues by subject matter experts within the various risk areas. They evaluate the adequacy and effectiveness of risk mitigation options, identify stakeholders of risks and issues, review material risk assumptions for reasonability and consistency across the Company and, working with the different risk areas, develop recommendations for risk limits, among other responsibilities.

Each of our business units and significant corporate functions maintains its own risk committee. The business unit risk committees serve as a forum for leaders within each business unit to identify, assess and resolve risk and exposure issues and to review new products and initiatives, prior to such issues being reviewed by the Risk Oversight Committees and/or the ERC as appropriate. Corporate function risk committees assess and monitor risks associated with performing the relevant corporate functions, set standards and exercise oversight over specific risks.

## Risk Identification

We use a variety of tools and processes to assess risk, such as quantitative tools for measurable financial risks and qualitative assessments for non-financial risks, such as certain operational risks. These tools form a part of the Company's risk identification framework, which uses three levels of activities to identify and escalate risks: (1) business unit activities, (2) corporate function activities, and (3) processes involving senior management and the Board of Directors.

Beginning with the development of material new products or services, we complete a risk assessment which may lead to changes in design features, terms, pricing, investment strategy or the use of other risk mitigation techniques to affect the risk/reward dynamics for the product or service. We also weigh risk decisions against the impact to our reputation and our ability to achieve our ratings objectives.

## Risk Exposure and Monitoring

We classify our risks into four general categories: investment risk, market risk, insurance risk and operational risk (which includes legal, regulatory and technology risk). In addition we are exposed to model risk, as well as reputational risk, which underlies, and is a part of, each risk assessment.

For information on risk as it relates to our capital and liquidity, see "-Liquidity and Capital Resources."

## Investment Risk Management

We view investment risk as the risk of loss on fixed maturity investments due to default or deterioration in credit quality, or loss on equity or real estate investments due to deterioration in value. Our exposure to investment risk is primarily comprised of:

- the risk that we will not receive contractual payments on a timely basis on fixed maturity investments (for example, credit default risk);
- the risk that our fixed maturity investments lose value due to a deterioration of credit quality (for example, the probability of default rises or the likelihood of recovery on a default deteriorates);
- the risk that a counterparty on derivatives, securities lending, reinsurance or other transactions does not meet its contractual obligations to us; and
- the risk that values of our non-coupon, equity and/or real estate equity investments decline.

With general account fixed maturities of $\$ 347$ billion as of December 31, 2016, Prudential Financial is exposed to significant credit risk. To manage this risk, we have a set of risk limits in place, including enterprise-level risk limits set by the Investment Committee of the Board of Directors. These limits are delineated into formal Investment Policy Statements which set limits on asset classes, permissible instruments, individual issuer, industry/sector and geographic exposures by individual legal entities, segments and business units. Compliance with most of these limits is measured on a daily basis, with some limits measured monthly or quarterly. In addition, our credit research departments closely monitor our credit exposures and maintain watch lists of exposures where there is a risk of impairment. If we have concerns about credit for a public exposure, we may sell some or all of that exposure or hedge the exposure with credit derivatives. See "-General Account Investments" for further information on our general account portfolio, including the composition of our fixed maturity portfolio by industry category and credit quality.

Our fixed income investments are subject to the risk of credit spread widening; however, changes in valuation due to credit spread widening or tightening are not realized unless we sell the assets prior to maturity. We consider this risk in the asset valuations used in our liquidity analysis.

We also monitor our equity, real estate equity and other non-coupon investment exposures on an ongoing basis, and our risk and portfolio management functions review these portfolios quarterly.

## Market Risk Management

We view market risk as the risk of loss from changes in interest rates, equity prices and foreign currency exchange rates resulting from asset/liability mismatches where the change in the value of our liabilities is not offset by the change in value of our assets.

Our asset/liability mismatch exposure is primarily comprised of:

- Interest rate risk arising from asset/liability duration mismatches within our general account investments as well as invested assets of other entities and operations. For further information, see "-General Account Investments-Management of Investments" and "-General Account Investments-Invested Assets of Other Entities and Operations" above.
- Equity risk primarily arising from unhedged equity exposure in our insurance liabilities, principally within our Annuities segment. For further information, see "-Individual Annuities-Variable Annuity Risks and Risk Mitigants" above.
- Foreign currency exchange rate risk arising from assets that are invested in a different currency than the related liability, as well as the unhedged portion of the Company's earnings from, and capital supporting, operations in a foreign currency. For further information, see "-International Insurance Division-Foreign Currency Exchange Rate Movements and Related Hedging Strategies" above.

In addition, market factors impact certain fee based earnings streams, accounting for the amortization of costs into earnings and the capital levels of our regulated entities.

For additional information on our exposure to market risk, including how this risk is managed, see "Quantitative and Qualitative Disclosures About Market Risk."

## Insurance Risk Management

We define insurance risk as the risk of loss due to deviations in experience compared to our assumptions. Our exposure is primarily comprised of:

- Mortality risk, or the risk that death claims are greater than expected, primarily within our Individual Life, Group Insurance and International Insurance segments, or the risk that policyholders survive longer than expected, primarily within our Retirement, Individual Annuities and International Insurance segments;
- Morbidity risk, or the risk that health claims from sickness or disability are greater than expected, primarily within our Group Insurance and International Insurance segments as well as from long-term care policies within Divested Businesses; and
- Policyholder behavior risk, or the risk that our customers' persistency experience or utilization experience differs from our expectations.

Underwriting insurance risk is a fundamental part of our business. We believe our scale provides for the benefits of diversification, both within an insurance risk type (potentially enhancing predictability of experience) and across insurance risk types (for example,
mortality trend risk benefits from a potential natural hedge between life and annuity blocks). Insurance risk mitigation begins with product design, as well as underwriting and pricing standards at the business unit level with corporate oversight. In some cases, the availability and/ or credibility of policyholder behavior experience may be limited, which we strive to reflect in the product design and pricing of the product. Processes are in place to ensure corporate oversight of the material insurance risk assumptions utilized in pricing and valuation.

## Operational Risk Management

Operational risk is defined as the risk of direct or indirect loss resulting from inadequate or failed internal processes and systems, employee actions, or as the result of external events. Operational risks are broad in scope and evident in each business unit and corporate function. We are exposed to operational risk in many ways, including, but not limited to:

- Legal and regulatory compliance risk
- Sales practices risk
- Fraud (internal and external) risk
- Reputational risk
- Employee risk
- Technology risk, including data security, system failures and processing errors
- Financial reporting risk
- Extreme events risk, such as loss of people and/or infrastructure caused by natural disasters, terrorism, disease, etc.
- Information risk
- Vendor risk

Each of our businesses and corporate functions is expected to manage its operational risks in compliance with enterprise standards. Our framework for identifying, evaluating, monitoring and managing operational risk includes: risk management committees; key risk indicators; risk and control assessments; loss event data collection and analysis; and resolution of control issues. We also have enterprise policies and standards, including: Legal and Regulatory/Compliance Policies, such as those relating to sales practices and supervision, fraud prevention, safeguarding of personal information, protection and use of material non-public information, personal conflicts of interest and outside business activities, anti-money laundering, and gifts and entertainment; Human Resources Policies, such as those relating to hiring, training and terminating the employment of our associates and succession planning; and Information Technology policies, including those on systems development and information security. We also maintain policies and standards to support the effective management of operational risk, including those concerning new product development, business continuation and disaster recovery, enterprise crisis management, vendor governance and privacy. Our Internal Audit Department independently audits key operational controls on a periodic basis to assess the effectiveness of our framework.

In order to respond to the threat of security breaches and cyber attacks, we have developed a program overseen by the Chief Information Security Officer and the Information Security Office that is designed to protect and preserve the confidentiality, integrity, and continued availability of all information owned by, or in the care of the Company. As part of this program, we also maintain an incident response plan. The program provides for the coordination of various corporate functions and governance groups, and serves as a framework for the execution of responsibilities across businesses and operational roles. The program establishes security standards for our technological resources, and includes training for employees, contractors and third parties. As part of the program, we conduct periodic exercises and a response readiness assessment with outside advisors to gain a third-party independent assessment of our technical program and our internal response preparedness. We regularly engage with the outside security community and monitor cyber threat information.

We are also exposed to emerging risks, such as those conditions, situations or trends that may significantly impact us in the future. By nature, these risks involve a high degree of uncertainty. ERM, together with our businesses, monitors and evaluates emerging risks on a regular basis.

## Model Risk Management

Models are utilized by our businesses and corporate functions primarily in projecting future cash flows associated with pricing products, calculating reserves and valuing assets, as well as in evaluating risk and determining capital requirements, among other uses. As our businesses continue to grow and evolve, the number and complexity of models we utilize expands, increasing our exposure to error in the design, implementation or use of models, including the associated input data and assumptions. We are mitigating this risk by implementing our Model Risk Policy, which outlines the governance and control requirements over the implementation and use of models, and through the activities of our Model Risk Oversight Committee which provides oversight and guidance on issues relating to model risk and the management of that risk.

For further information on the risks to which the Company is exposed, see "Risk Factors" included in Prudential Financial's 2016 Annual Report on Form 10-K.

## QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

## Market Risk

Market risk is defined as the risk of loss from changes in interest rates, equity prices and foreign currency exchange rates resulting from asset/liability mismatches where the change in the value of our liabilities is not offset by the change in value of our assets.

For additional information regarding the potential impacts of interest rate and other market fluctuations, as well as general economic and market conditions on our businesses and profitability, see "Risk Factors" included in Prudential Financial's 2016 Annual Report on Form 10-K. For additional information regarding the overall management of our general account investments and our asset mix strategies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-General Account InvestmentsManagement of Investments" above. For additional information regarding our liquidity and capital resources, which may be impacted by changing market risks, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources" above.

## Market Risk Management

Management of market risk, which we consider to be a combination of both investment risk and market risk exposures as described in "Management's Discussion and Analysis of Financial Condition and Results of Operations-Risk Management" above, includes the identification and measurement of various forms of risk, the establishment of risk thresholds and the creation of processes intended to maintain risks within these thresholds while optimizing returns on the underlying assets or liabilities. Risk range limits are established for each type of market risk and are approved by the Investment Committee of the Board of Directors and subject to ongoing review.

Our risk management process utilizes a variety of tools and techniques, including:

- Measures of price sensitivity to market changes (e.g., interest rates, equity index prices, foreign exchange);
- Asset/liability mismatch analytics;
- Stress scenario testing;
- Hedging programs; and
- Risk management governance, including policies, limits, and a committee that oversees investment and market risk. For additional information regarding our overall risk management framework and governance structure, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Risk Management" above.


## Market Risk Mitigation

Risk mitigation takes three primary forms:

- Asset/Liability Management: Managing assets to liability-based measures. For example, investment policies identify target durations for assets based on liability characteristics and asset portfolios are managed to within ranges around them. This mitigates potential unanticipated economic losses from interest rate movements.
- Hedging non-strategic exposures. For example, our investment policies for our general account portfolios generally require hedging currency risk for cash flows not offset by similarly denominated liabilities.
- Management of portfolio concentration risk. For example, ongoing monitoring and management at the enterprise level of key rate, currency and other concentration risks support diversification efforts to mitigate exposure to individual markets and sources of risk.


## Market Risk Related to Interest Rates

We perform liability-driven investing and engage in careful asset/liability management. Asset/liability mismatches create the risk that changes in liability values will differ from the changes in the value of the related assets. Additionally, changes in interest rates may impact other items including, but not limited to, the following:

- Net investment spread between the amounts that we are required to pay and the rate of return we are able to earn on investments for certain products supported by general account investments;
- Asset-based fees earned on assets under management or contractholder account values;
- Estimated total gross profits and the amortization of deferred policy acquisition and other costs;
- Net exposure to the guarantees provided under certain products; and
- Capital levels of our regulated entities.

We use duration and convexity analyses to measure price sensitivity to interest rate changes. Duration measures the relative sensitivity of the fair value of a financial instrument to changes in interest rates. Convexity measures the rate of change of duration with respect to changes in interest rates. We use asset/liability management and derivative strategies to manage our interest rate exposure by legal entity by matching the relative sensitivity of asset and liability values to interest rate changes, or controlling "duration mismatch" of assets and liabilities. We have duration mismatch constraints tailored to the rate sensitivity of products in each entity. In certain markets, primarily outside the U.S. and Japan, capital market limitations that hinder our ability to acquire assets that approximate the duration of some of our liabilities are considered in setting the limits. As of December 31, 2016 and 2015, the difference between the duration of assets and the target duration of liabilities in our duration-managed portfolios was within our policy limits. We consider risk-based capital and tax implications as well as current market conditions in our asset/liability management strategies.

We assess the impact of interest rate movements on the value of our financial assets, financial liabilities and derivatives using hypothetical test scenarios that assume either upward or downward 100 basis point parallel shifts in the yield curve from prevailing interest
rates, reflecting changes in either credit spreads or the risk-free rate. The following table sets forth the net estimated potential loss in fair value on these financial instruments from a hypothetical 100 basis point upward shift as of December 31, 2016 and 2015. This table is presented on a gross basis and excludes offsetting impacts to insurance liabilities that are not considered financial liabilities under U.S GAAP. This scenario results in the greatest net exposure to interest rate risk of the hypothetical scenarios tested at those dates. While the test scenario is for illustrative purposes only and does not reflect our expectations regarding future interest rates or the performance of fixed income markets, it is a near-term, reasonably possible hypothetical change that illustrates the potential impact of such events. These test scenarios do not measure the changes in value that could result from non-parallel shifts in the yield curve which we would expect to produce different changes in discount rates for different maturities. As a result, the actual loss in fair value from a 100 basis point change in interest rates could be different from that indicated by these calculations. The estimated changes in fair values do not include separate account assets.

|  | As of December 31, 2016 |  |  | As of December 31, 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Notional | Fair Value | Hypothetical Change in Fair Value | Notional | Fair <br> Value | Hypothetical Change in Fair Value |
|  | (in millions) |  |  |  |  |  |
| Financial assets with interest rate risk: |  |  |  |  |  |  |
| Fixed maturities(1) |  | \$ 347,246 | \$ $(33,171)$ |  | \$322,207 | \$ $(27,832)$ |
| Commercial mortgage and other loans |  | 54,283 | $(2,626)$ |  | 51,853 | $(2,369)$ |
| Derivatives with interest rate risk: |  |  |  |  |  |  |
| Swaps | \$209,406 | 7,097 | $(5,415)$ | \$219,511 | 8,423 | $(5,960)$ |
| Futures | 32,555 | 49 | (995) | 28,538 | 10 | (131) |
| Options | 25,403 | 166 | 284 | 89,107 | 232 | (868) |
| Forwards | 21,530 | (519) | (20) | 17,809 | 204 | (5) |
| Synthetic GICs | 77,197 | 5 | (1) | 72,585 | 7 | 0 |
| Variable annuity and other living benefit feature embedded derivatives(2) |  | $(8,238)$ | 5,386 |  | $(8,434)$ | 5,072 |
| Financial liabilities with interest rate risk(3): |  |  |  |  |  |  |
| Short-term and long-term debt |  | $(21,079)$ | 3,049 |  | $(22,522)$ | 3,214 |
| Policyholders' account balances-investment contracts |  | $(100,045)$ | 3,570 |  | $(94,271)$ | 3,302 |
| Net estimated potential loss |  |  | \$(29,939) |  |  | \$(25,577) |

(1) Includes fixed maturities classified as "trading account assets supporting insurance liabilities" and other fixed maturities classified as trading securities under U.S. GAAP, but are held for "other than trading" activities in our segments that offer insurance, retirement and annuities products. Includes approximately $\$ 345$ billion and $\$ 320$ billion as of December 31, 2016 and 2015, respectively, of fixed maturities classified as "available-for-sale", where unrealized gains and losses are recorded in AOCI.
(2) Excludes any offsetting impact of derivative instruments purchased to hedge changes in the embedded derivatives. Amounts reported net of third-party reinsurance.
(3) Excludes approximately $\$ 286$ billion and $\$ 267$ billion as of December 31, 2016 and 2015, respectively, of insurance reserve and deposit liabilities which are not considered financial liabilities. We believe that the interest rate sensitivities of these insurance liabilities would serve as an offset to the net interest rate risk of the financial assets and liabilities, including investment contracts.

Under U.S. GAAP, the fair value of the embedded derivatives for certain variable annuity and other living benefit features, reflected in the table above, includes the impact of the market's perception of our own NPR. The additional credit spread over LIBOR rates incorporated into the discount rate as of December 31, 2016, to reflect NPR in the valuation of these embedded derivatives, ranged from 25 to 150 basis points.

The following table provides a demonstration of the sensitivity of these embedded derivatives to our NPR credit spread by quantifying the adjustments that would be required assuming both a 50 basis point parallel increase and decrease in our NPR credit spreads. While the information below is for illustrative purposes only and does not reflect our expectations regarding our credit spreads, it is a near-term, reasonably possible change that illustrates the potential impact of such a change. This information considers only the direct effect of changes in our credit spread on operating results due to the change in these embedded derivatives, and not changes in any other assumptions such as persistency, utilization and mortality, or the effect of these changes on DAC or other balances.


For an additional discussion of our variable annuity optional living benefit guarantees accounted for as embedded derivatives and related derivatives used to hedge the changes in fair value of these embedded derivatives, see "Market Risk Related to Certain Variable Annuity Products" below. For additional information about the key estimates and assumptions used in our determination of fair value, see Note 20 to the Consolidated Financial Statements below. For information on the impacts of a sustained low interest rate environment, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Executive Summary-Impact of a Low Interest Rate Environment" above.

## Market Risk Related to Equity Prices

We have exposure to equity risk through asset/liability mismatches, including our investments in equity securities held in our general account investment portfolio and unhedged exposure in our insurance liabilities, principally related to certain variable annuity living benefit feature embedded derivatives. Our equity-based derivatives primarily hedge the equity risk embedded in these living benefit feature embedded derivatives, and are also part of our capital hedging program. Changes in equity prices create risk that the resulting changes in asset values will differ from the changes in the value of the liabilities relating to the underlying or hedged products. Additionally, changes in equity prices may impact other items including, but not limited to, the following:

- Asset-based fees earned on assets under management or contractholder account value;
- Estimated total gross profits and the amortization of deferred policy acquisition and other costs; and
- Net exposure to the guarantees provided under certain products.

We manage equity risk against benchmarks in respective markets. We benchmark our return on equity holdings against a blend of market indices, mainly the S\&P 500 and Russell 2000 for U.S. equities. We benchmark foreign equities against the Tokyo Price Index, and the MSCI EAFE, a market index of European, Australian, and Far Eastern equities. We target price sensitivities that approximate those of the benchmark indices.

We estimate our equity risk from a hypothetical $10 \%$ decline in equity benchmark market levels. The following table sets forth the net estimated potential loss in fair value from such a decline as of December 31, 2016 and 2015. While these scenarios are for illustrative purposes only and do not reflect our expectations regarding future performance of equity markets or of our equity portfolio, they represent near-term reasonably possible hypothetical changes that illustrate the potential impact of such events. These scenarios consider only the direct impact on fair value of declines in equity benchmark market levels and not changes in asset-based fees recognized as revenue, changes in our estimates of total gross profits used as a basis for amortizing deferred policy acquisition and other costs, or changes in any other assumptions such as market volatility or mortality, utilization or persistency rates in our variable annuity contracts that could also impact the fair value of our living benefit features. In addition, these scenarios do not reflect the impact of basis risk, such as potential differences in the performance of the investment funds underlying the variable annuity products relative to the market indices we use as a basis for developing our hedging strategy. The impact of basis risk could result in larger differences between the change in fair value of the equity-based derivatives and the related living benefit features in comparison to these scenarios. In calculating these amounts, we exclude separate account equity securities.

|  | As of December 31, 2016 |  |  | As of December 31, 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Notional | Fair Value | Hypothetical Change in Fair Value | Notional | Fair Value | Hypothetical Change in Fair Value |
|  | (in millions) |  |  |  |  |  |
| Equity securities(1) |  | \$12,139 | \$ $(1,214)$ |  | \$11,626 | \$ $(1,163)$ |
| Equity-based derivatives(2) | \$31,558 | (285) | 1,137 | \$68,011 | (38) | 1,917 |
| Variable annuity and other living benefit feature embedded derivatives(2)(3) |  | $(8,238)$ | $(1,116)$ |  | $(8,434)$ | $(1,355)$ |
| Net estimated potential loss |  |  | \$(1,193) |  |  | \$ (601) |

(1) Includes equity securities classified as "trading account assets supporting insurance liabilities" and other equity securities classified as trading securities under U.S. GAAP, but are held for "other than trading" activities in our segments that offer insurance, retirement and annuities products.
(2) The notional and fair value of equity-based derivatives and the fair value of variable annuity and other living benefit feature embedded derivatives are also reflected in amounts under "Market Risk Related to Interest Rates" above, and are not cumulative.
(3) Excludes any offsetting impact of derivative instruments purchased to hedge changes in the embedded derivatives. Amounts reported net of third-party reinsurance.

## Market Risk Related to Foreign Currency Exchange Rates

As a U.S.-based company with significant business operations outside of the U.S., particularly in Japan, we are exposed to foreign currency exchange rate risk related to these operations, as well as in our general account investment portfolio and other proprietary investment portfolios.

For our international insurance operations, changes in foreign currency exchange rates create risk that we may experience volatility in the U.S. dollar-equivalent earnings and equity of these operations. We actively manage this risk through various hedging strategies, including the use of foreign currency hedges and through holding U.S. dollar-denominated securities in the investment portfolios of certain of these operations. Additionally, our Japanese insurance operations offer a variety of non-yen denominated products which are supported by investments in corresponding currencies. While these non-yen denominated assets are economically matched to the currency of the product liabilities, the accounting treatment may differ for changes in the value of these assets and liabilities due to moves in foreign currency exchange rates, resulting in volatility in reported U.S. GAAP earnings. This volatility has been mitigated by disaggregating the U.S. and Australian dollar-denominated businesses in Gibraltar Life into separate divisions, each with its own functional currency that aligns with the underlying products and investments. For certain of our international insurance operations outside of Japan, we elect to not hedge the risk of changes in our equity investments due to foreign exchange rate movements. For further information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Impact of Foreign Currency Exchange Rates-Impact of products denominated in non-local currencies on U.S. GAAP earnings" above.

For our domestic general account investment portfolios supporting our U.S. insurance operations and other proprietary investment portfolios, our foreign currency exchange rate risk arises primarily from investments that are denominated in foreign currencies. We
manage this risk by hedging substantially all domestic foreign currency denominated fixed income investments into U.S. dollars. We generally do not hedge all of the foreign currency risk of our investments in equity securities of unaffiliated foreign entities.

We manage our foreign currency exchange rate risks within specified limits, and estimate our exposure, excluding equity in our Japanese insurance operations, to a hypothetical $10 \%$ change in foreign currency exchange rates. The following table sets forth the net estimated potential loss in fair value from such a change as of December 31, 2016 and 2015. While these scenarios are for illustrative purposes only and do not reflect our expectations regarding future changes in foreign exchange markets, they represent reasonably possible near-term hypothetical changes that illustrate the potential impact of such events.

|  | As of December 31, 2016 |  | As of December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fair Value | Hypothetical Change in Fair Value | Fair Value | Hypothetical Change in Fair Value |
|  | (in millions) |  |  |  |
| Unhedged portion of equity investment in international subsidiaries and foreign currency denominated investments in domestic general account portfolio | \$5,003 | \$(500) | \$3,934 | \$(393) |

For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-General Account Investments-Portfolio Composition" and "Management's Discussion and Analysis of Financial Condition and Results of Operations-Results of Operations by Segment-International Insurance Division" above.

## Derivatives

We use derivative financial instruments primarily to reduce market risk from changes in interest rates, equity prices and foreign currency exchange rates, including their use to alter interest rate or foreign currency exposures arising from mismatches between assets and liabilities. Our derivatives primarily include swaps, futures, options and forward contracts that are exchange-traded or contracted in the OTC market.

Our derivatives also include interest rate guarantees we provide on our synthetic GIC products. Synthetic GICs simulate the performance of traditional insurance-related GICs but are accounted for as derivatives under U.S. GAAP due to the fact that the policyholders own the underlying assets, and we only provide a book value "wrap" on the customers' funds, which are held in a clientowned trust. Since these wraps provide payment of guaranteed principal and interest to the customer, changes in interest rates create risk that declines in the market value of customers' funds would increase our net exposure to these guarantees; however, our obligation is limited to payments that are in excess of the existing customers' fund value. Additionally, we have the ability to periodically reset crediting rates, subject to a $0 \%$ minimum floor, as well as the ability to increase prices. Further, our contract provisions provide that, although participants may withdraw funds at book value, contractholder withdrawals may only occur at market value immediately, or at book value over time. These factors, among others, result in these contracts experiencing minimal changes in fair value, despite a more significant notional value.

Our derivatives also include those that are embedded in certain financial instruments, and primarily relate to certain optional living benefit features associated with our variable annuity products, as discussed in more detail in "Market Risk Related to Certain Variable Annuity Products" below. For additional information on our derivative activities, see Note 21 to the Consolidated Financial Statements below.

## Market Risk Related to Certain Variable Annuity Products

The primary risk exposures of our variable annuity contracts relate to actual deviations from, or changes to, the assumptions used in the original pricing of these products, including capital markets assumptions, such as equity market returns, interest rates and market volatility and actuarial assumptions. For our capital markets assumptions, we manage our exposure to the risk created by capital markets fluctuations through a combination of product design elements, such as an automatic rebalancing element and inclusion of certain optional living benefits in our living benefits hedging program. In addition, we consider external reinsurance a form of risk mitigation. Certain variable annuity optional living benefit features are accounted for as an embedded derivative and recorded at fair value. The market risk sensitivities associated with U.S. GAAP values of both the embedded derivatives and the related derivatives used to hedge the changes in fair value of these embedded derivatives are provided under "Market Risk Related to Interest Rates" and "Market Risk Related to Equity Prices" above.

For additional information regarding our risk management strategies, including our living benefit hedging program and other product design elements, see "Management's Discussion and Analysis of Financial Condition and Results of Operations-Results of Operations by Segment-Individual Annuities" above.

## CONSOLIDATED FINANCIAL STATEMENTS

## Management's Annual Report on Internal Control Over Financial Reporting

Management of Prudential Financial, Inc. (together with its consolidated subsidiaries, the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. Management conducted an assessment of the effectiveness, as of December 31, 2016, of the Company's internal control over financial reporting, based on the framework established in Internal ControlIntegrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our assessment under that framework, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2016.

Our internal control over financial reporting is a process designed by or under the supervision of our principal executive and principal financial officers 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. Our internal control over financial reporting includes policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; (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 are being made only in accordance with authorizations of management and the 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 our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2016, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing herein.

February 17, 2017

## Report of Independent Registered Public Accounting Firm

## To the Board of Directors and Stockholders of Prudential Financial, Inc.:

In our opinion, the accompanying consolidated statements of financial position and the related consolidated statements of operations, comprehensive income, equity and cash flows present fairly, in all material respects, the financial position of Prudential Financial, Inc. and its subsidiaries at December 31, 2016 and December 31, 2015 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control_Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) 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.

## Pminvaramane Coqumbs

New York, New York
February 17, 2017

## PRUDENTIAL FINANCIAL, INC.

## Consolidated Statements of Financial Position December 31, 2016 and 2015 (in millions, except share amounts)

|  | 2016 | 2015 |
| :---: | :---: | :---: |
| ASSETS |  |  |
| Fixed maturities, available-for-sale, at fair value (amortized cost: 2016 - \$292,581; 2015 - \$265,416)(1) | \$321,419 | \$290,323 |
| Fixed maturities, held-to-maturity, at amortized cost (fair value: 2016-\$2,524; 2015 - \$2,624)(1) | 2,144 | 2,308 |
| Trading account assets supporting insurance liabilities, at fair value(1) | 21,840 | 20,522 |
| Other trading account assets, at fair value(1) | 5,764 | 14,458 |
| Equity securities, available-for-sale, at fair value (cost: 2016-\$7,149; 2015-\$6,847) | 9,748 | 9,274 |
| Commercial mortgage and other loans (includes $\$ 519$ and $\$ 274$ measured at fair value under the fair value option as of December 31, 2016 and 2015, respectively)(1) | 52,779 | 50,559 |
| Policy loans | 11,755 | 11,657 |
| Other long-term investments (includes $\$ 1,556$ and $\$ 1,322$ measured at fair value under the fair value option as of December 31, 2016 and 2015, respectively)(1) | 11,283 | 9,986 |
| Short-term investments | 7,508 | 8,105 |
| Total investments | 444,240 | 417,192 |
| Cash and cash equivalents(1) | 14,127 | 17,612 |
| Accrued investment income(1) | 3,204 | 3,110 |
| Deferred policy acquisition costs | 17,661 | 16,718 |
| Value of business acquired | 2,314 | 2,828 |
| Other assets(1)(2) | 14,780 | 14,225 |
| Separate account assets | 287,636 | 285,570 |
| TOTAL ASSETS | \$783,962 | \$757,255 |
| LIABILITIES AND EQUITY |  |  |
| LIABILITIES |  |  |
| Future policy benefits | \$240,908 | \$224,384 |
| Policyholders' account balances | 145,205 | 136,784 |
| Policyholders' dividends | 5,711 | 5,578 |
| Securities sold under agreements to repurchase | 7,606 | 7,882 |
| Cash collateral for loaned securities | 4,333 | 3,496 |
| Income taxes | 10,412 | 8,714 |
| Short-term debt | 1,133 | 1,216 |
| Long-term debt(2) | 18,041 | 19,594 |
| Other liabilities(1) | 14,739 | 13,517 |
| Notes issued by consolidated variable interest entities (includes $\$ 1,839$ and $\$ 8,597$ measured at fair value under the fair value option as of December 31, 2016 and 2015, respectively)(1) | 2,150 | 8,597 |
| Separate account liabilities | 287,636 | 285,570 |
| Total liabilities | 737,874 | 715,332 |
| COMMITMENTS AND CONTINGENT LIABILITIES (See Note 23) |  |  |
| EQUITY |  |  |
| Preferred Stock (\$.01 par value; 10,000,000 shares authorized; none issued) | 0 | 0 |
| Common Stock ( $\$ .01$ par value; 1,500,000,000 shares authorized; 660,111,339 shares issued as of both December 31, 2016 and 2015) | 6 |  |
| Additional paid-in capital | 24,606 | 24,482 |
| Common Stock held in treasury, at cost (230,537,166 and 213,009,970 shares as of December 31, 2016 and 2015, respectively) | $(15,316)$ | $(13,814)$ |
| Accumulated other comprehensive income (loss) | 14,621 | 12,285 |
| Retained earnings | 21,946 | 18,931 |
| Total Prudential Financial, Inc. equity | 45,863 | 41,890 |
| Noncontrolling interests | 225 | 33 |
| Total equity | 46,088 | 41,923 |
| TOTAL LIABILITIES AND EQUITY | \$783,962 | \$757,255 |

[^6]
## PRUDENTIAL FINANCIAL, INC.

## Consolidated Statements of Operations

Years Ended December 31, 2016, 2015 and 2014 (in millions, except per share amounts)

(1) For 2016 and 2015, represents consolidated earnings per share of Common Stock. For 2014, represents earnings of the Company's former Financial Services Businesses per share of Common Stock. See Note 16 for additional information.

## PRUDENTIAL FINANCIAL, INC.

## Consolidated Statements of Comprehensive Income Years Ended December 31, 2016, 2015 and 2014 (in millions)

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
| NET INCOME (LOSS) | \$4,419 | \$ 5,712 | \$ 1,438 |
| Other comprehensive income (loss), before tax: |  |  |  |
| Foreign currency translation adjustments for the period | 256 | (287) | $(1,081)$ |
| Net unrealized investment gains (losses) | 3,683 | $(5,486)$ | 13,730 |
| Defined benefit pension and postretirement unrecognized periodic benefit (cost) | (254) | (264) | $\underline{(1,043)}$ |
| Total | 3,685 | $(6,037)$ | 11,606 |
| Less: Income tax expense (benefit) related to other comprehensive income (loss) | 1,305 | $(2,213)$ | 4,249 |
| Other comprehensive income (loss), net of taxes | 2,380 | $(3,824)$ | 7,357 |
| Comprehensive income (loss) | 6,799 | 1,888 | 8,795 |
| Less: Comprehensive income (loss) attributable to noncontrolling interests | 95 | 11 | 45 |
| Comprehensive income (loss) attributable to Prudential Financial, Inc. | \$6,704 | \$ 1,877 | \$ 8,750 |

## PRUDENTIAL FINANCIAL, INC.

## Consolidated Statements of Equity Years Ended December 31, 2016, 2015 and 2014 (in millions)

|  | Common Stock | Additional <br> Paid-in Capital | Retained Earnings | Common Stock Held In Treasury | Class B Stock Held in Treasury | Accumulated Other Comprehensive Income (Loss) | Total Prudential Financial, Inc. Equity | Noncontrolling Interests | Total Equity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance, December 31, 2013 | \$6 | \$24,475 | \$14,531 | \$(12,415) |  | \$ 8,681 | \$35,278 | \$603 | \$35,881 |
| Common and Class B Stock acquired |  |  |  | $(1,000)$ | (651) |  | $(1,651)$ |  | $(1,651)$ |
| Contributions from noncontrolling interests |  | (4) |  |  |  |  | (4) | 107 | 103 |
| Distributions to noncontrolling interests |  |  |  |  |  |  |  | (175) | (175) |
| Consolidations/(deconsolidations) of noncontrolling interests |  |  |  |  |  |  |  | (1) | (1) |
| Stock-based compensation programs |  | 94 |  | 327 |  |  | 421 |  | 421 |
| Dividends declared on Common Stock |  |  | $(1,005)$ |  |  |  | $(1,005)$ |  | $(1,005)$ |
| Dividends declared on Class B Stock |  |  | (19) |  |  |  | (19) |  | (19) |
| Comprehensive income: |  |  |  |  |  |  |  |  |  |
| Net income (loss) . |  |  | 1,381 |  |  |  | 1,381 | 57 | 1,438 |
| Other comprehensive income (loss), net of tax |  |  |  |  |  | 7,369 | 7,369 | (12) | 7,357 |
| Total comprehensive income (loss) |  |  |  |  |  |  | 8,750 | 45 | 8,795 |
| Balance, December 31, 2014 | 6 | 24,565 | 14,888 | $(13,088)$ | (651) | 16,050 | 41,770 | 579 | 42,349 |
| Common Stock acquired |  |  |  | $(1,000)$ |  |  | $(1,000)$ |  | $(1,000)$ |
| Class B Stock canceled . |  | (167) | (484) |  | 651 |  | 0 |  | 0 |
| Contributions from noncontrolling interests |  |  |  |  |  |  |  | 28 | 28 |
| Distributions to noncontrolling interests |  |  |  |  |  |  |  | (437) | (437) |
| Consolidations/(deconsolidations) of noncontrolling interests |  |  |  |  |  |  |  | (148) | (148) |
| Stock-based compensation programs |  | 84 |  | 274 |  |  | 358 |  | 358 |
| Dividends declared on Common Stock |  |  | $(1,115)$ |  |  |  | $(1,115)$ |  | $(1,115)$ |
| Comprehensive income: |  |  |  |  |  |  |  |  |  |
| Net income (loss) |  |  | 5,642 |  |  |  | 5,642 | 70 | 5,712 |
| Other comprehensive income (loss), net of tax |  |  |  |  |  | $(3,765)$ | $(3,765)$ | (59) | $(3,824)$ |
| Total comprehensive income (loss) |  |  |  |  |  |  | 1,877 | 11 | 1,888 |
| Balance, December 31, 2015 | 6 | 24,482 | 18,931 | $(13,814)$ | 0 | 12,285 | 41,890 | 33 | 41,923 |
| Cumulative effect of adoption of accounting changes . |  |  | 11 |  |  |  | 11 | (30) | (19) |
| Common Stock acquired |  |  |  | $(2,000)$ |  |  | $(2,000)$ |  | $(2,000)$ |
| Class B Stock repurchase adjustment |  |  | (119) |  |  |  | (119) |  | (119) |
| Contributions from noncontrolling interests |  |  |  |  |  |  |  | 7 | 7 |
| Distributions to noncontrolling interests |  |  |  |  |  |  |  | (351) | (351) |
| Consolidations/(deconsolidations) of noncontrolling interests |  |  |  |  |  |  |  | 471 | 471 |
| Stock-based compensation programs |  | 124 |  | 498 |  |  | 622 |  | 622 |
| Dividends declared on Common Stock |  |  | $(1,245)$ |  |  |  | $(1,245)$ |  | $(1,245)$ |
| Comprehensive income: |  |  |  |  |  |  |  |  |  |
| Net income (loss) |  |  | 4,368 |  |  |  | 4,368 | 51 | 4,419 |
| Other comprehensive income (loss), net of tax |  |  |  |  |  | 2,336 | 2,336 | 44 | 2,380 |
| Total comprehensive income (loss) |  |  |  |  |  |  | 6,704 | 95 | 6,799 |
| Balance, December 31, 2016 | \$6 | \$24,606 | \$21,946 | \$(15,316) | \$ 0 | \$14,621 | \$45,863 | \$225 | \$46,088 |

See Notes to Consolidated Financial Statements

## PRUDENTIAL FINANCIAL, INC.

## Consolidated Statements of Cash Flows Years Ended December 31, 2016, 2015 and 2014 (in millions)

|  |  | 2016 |  | 2015 |  | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CASH FLOWS FROM OPERATING ACTIVITIES |  |  |  |  |  |  |
| Net income (loss) |  | \$ 4,419 |  | 5,712 |  | 1,438 |
| Adjustments to reconcile net income (loss) to net cash provided by operating activities: |  |  |  |  |  |  |
| Realized investment (gains) losses, net |  | $(2,194)$ |  | $(4,025)$ |  | $(1,636)$ |
| Policy charges and fee income . . . . . . |  | $(1,907)$ |  | $(1,883)$ |  | $(2,156$ |
| Interest credited to policyholders' account balances |  | 3,761 |  | 3,479 |  | 4,263 |
| Depreciation and amortization |  | 318 |  | 113 |  | 631 |
| (Gains) losses on trading account assets supporting insurance liabilities, net |  | 17 |  | 524 |  | (339) |
| Change in: |  |  |  |  |  |  |
| Deferred policy acquisition costs |  | (968) |  | (533) |  | (721) |
| Future policy benefits and other insurance liabilities |  | 10,584 |  | 8,311 |  | 11,276 |
| Other trading account assets |  | (60) |  | 256 |  | 44 |
| Income taxes(1) |  | 618 |  | 1,217 |  | 298 |
| Derivatives, net |  | 1,067 |  | 1,305 |  | 4,989 |
| Other, net(1) |  | (877) |  | (581) |  | 1,309 |
| Cash flows from (used in) operating activities |  | 14,778 |  | 13,895 |  | 19,396 |
| CASH FLOWS FROM INVESTING ACTIVITIES |  |  |  |  |  |  |
| Proceeds from the sale/maturity/prepayment of: |  |  |  |  |  |  |
| Fixed maturities, available-for-sale . |  | 49,713 |  | 47,080 |  | 49,529 |
| Fixed maturities, held-to-maturity |  | 271 |  | 235 |  | 415 |
| Trading account assets supporting insurance liabilities and other trading account assets |  | 34,139 |  | 14,313 |  | 13,548 |
| Equity securities, available-for-sale |  | 3,502 |  | 4,577 |  | 5,001 |
| Commercial mortgage and other loans |  | 6,342 |  | 5,464 |  | 4,076 |
| Policy loans . . . . . . . . |  | 2,277 |  | 2,199 |  | 2,084 |
| Other long-term investments |  | 1,145 |  | 1,276 |  | 574 |
| Short-term investments |  | 43,700 |  | 77,021 |  | 73,823 |
| Payments for the purchase/origination of: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Fixed maturities, held-to-maturity |  | 0 |  | 0 |  | (21) |
| Trading account assets supporting insurance liabilities and other trading account assets |  | $(36,532)$ |  | $(18,608)$ |  | $(16,522)$ |
| Equity securities, available-for-sale |  | $(3,083)$ |  | $(4,055)$ |  | $(4,476)$ |
| Commercial mortgage and other loans |  | $(8,548)$ |  | $(9,392)$ |  | $(9,346)$ |
| Policy loans. |  | $(1,882)$ |  | $(1,782)$ |  | $(1,855)$ |
| Other long-term investments |  | $(1,923)$ |  | $(2,005)$ |  | $(1,805)$ |
| Short-term investments |  | $(43,370)$ |  | $(76,622)$ |  | $(74,295)$ |
| Acquisitions, net of cash acquired |  | (532) |  | 0 |  | (23) |
| Derivatives, net |  | 314 |  | 53 |  | (555) |
| Other, net |  | (227) |  | 106 |  | 227 |
| Cash flows from (used in) investing activities |  | (21,551) |  | $(7,746)$ |  | (17,088) |
| CASH FLOWS FROM FINANCING ACTIVITIES |  |  |  |  |  |  |
| Policyholders' account deposits |  | 29,642 |  | 23,206 |  | 23,977 |
| Policyholders' account withdrawals |  | $(24,143)$ |  | $(21,963)$ |  | $(22,003)$ |
| Net change in securities sold under agreements to repurchase and cash collateral for loaned s |  | ( 561 |  | $(2,270)$ |  | 710 |
| Cash dividends paid on Common Stock |  | $(1,300)$ |  | $(1,117)$ |  | $(1,008)$ |
| Cash dividends paid on Class B Stock |  | 0 |  | 0 |  | (19) |
| Net change in financing arrangements (maturities 90 days or less) |  | 292 |  | 68 |  | (27) |
| Common Stock acquired |  | $(2,000)$ |  | $(1,013)$ |  | $(1,000)$ |
| Class B stock acquired |  | (119) |  | (651) |  | 0 |
| Common Stock reissued for exercise of stock options |  | 426 |  | 209 |  | 269 |
| Proceeds from the issuance of debt (maturities longer than 90 days) |  | 2,742 |  | 5,166 |  | 7,955 |
| Repayments of debt (maturities longer than 90 days) . |  | $(2,753)$ |  | $(4,957)$ |  | $(7,384)$ |
| Excess tax benefits from share-based payment arrangements |  | 21 |  | 19 |  | 26 |
| Other, net . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  | (131) |  | (221) |  | 133 |
| Cash flows from (used in) financing activities |  | 3,238 |  | $(3,524)$ |  | 1,629 |
| Effect of foreign exchange rate changes on cash balances |  | 50 |  | 69 |  | (458) |
| NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS |  | $(3,485)$ |  | 2,694 |  | 3,479 |
| CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR |  | 17,612 |  | 14,918 |  | 11,439 |
| CASH AND CASH EQUIVALENTS, END OF YEAR |  | \$14,127 |  | 17,612 |  | 14,918 |
| SUPPLEMENTAL CASH FLOW INFORMATION |  |  |  |  |  |  |
| Income taxes paid, net of refunds |  | \$ 770 |  | 1,083 |  | 109 |
| Interest paid |  | \$ 1,257 |  | 1,324 |  | 1,883 |
| NON-CASH TRANSACTIONS DURING THE YEAR |  |  |  |  |  |  |
| Treasury Stock shares issued for stock-based compensation programs |  | \$ 115 |  | 115 |  | 100 |
| Significant Pension Risk Transfer transactions: |  |  |  |  |  |  |
| Assets received, excluding cash and cash equivalents |  | \$ 3,228 |  | 2,091 |  | 1,435 |
| Liabilities assumed . . . . . . . . . . . . . . . . . . . . . . . . . |  | 5,003 |  | 3,739 |  | 4,653 |
| Net cash received |  | \$ 1,775 |  | 1,648 |  | 3,218 |
| Acquisition of Gibraltar BSN Life Berhad (See Note 3): |  |  |  |  |  |  |
| Assets acquired, excluding cash and cash equivalents acquired |  | \$ 0 | \$ | 0 |  | 656 |
| Liabilities assumed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  | 0 |  | 0 |  | 586 |
| Noncontrolling interest assumed |  | 0 |  | 0 |  | 47 |
| Net cash paid on acquisition | \$ | \$ 0 | \$ | 0 | \$ | 23 |

(1) Prior period amounts have been reclassified to conform to current period presentation.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 1. BUSINESS AND BASIS OF PRESENTATION

Prudential Financial, Inc. ("Prudential Financial") and its subsidiaries (collectively, "Prudential" or the "Company" or "PFI") provide a wide range of insurance, investment management, and other financial products and services to both individual and institutional customers throughout the United States and in many other countries. Principal products and services provided include life insurance, annuities, retirement-related services, mutual funds and investment management.

From December 18, 2001, the date of demutualization, through December 31, 2014, the Company organized its principal operations into the Financial Services Businesses and the Closed Block Business, and had two classes of common stock outstanding. The Common Stock, which is publicly traded (NYSE:PRU), reflected the performance of the Financial Services Businesses, while the Class B Stock, which was issued through a private placement and did not trade on any exchange, reflected the performance of the Closed Block Business.

On January 2, 2015, Prudential Financial repurchased and canceled all of the shares of the Class B Stock (the "Class B Repurchase"). As a result, the Company no longer organizes its principal operations into the Financial Services Businesses and the Closed Block Business. The Company's principal operations are comprised of four divisions: the U.S. Retirement Solutions and Investment Management division, the U.S. Individual Life and Group Insurance division, the International Insurance division and the Closed Block division. The Closed Block division is accounted for as a divested business that is reported separately from the divested businesses that are included in the Company's Corporate and Other operations. The Company's Corporate and Other operations include corporate items and initiatives that are not allocated to business segments and businesses that have been or will be divested, excluding the Closed Block division.

## Basis of Presentation

As a result of the Class B Repurchase and resulting elimination of the separation of the Financial Services Businesses and the Closed Block Business, these Consolidated Financial Statements refer to the divisions and segments of the Company that formerly comprised the Financial Services Businesses as "PFI excluding Closed Block division" and refer to the operations that were formerly included in the Closed Block Business as the "Closed Block division," except as otherwise noted. Closed Block Business results were associated with the Company's Class B Stock for periods prior to January 1, 2015.

The Company's Consolidated Financial Statements include the accounts of Prudential Financial, entities over which the Company exercises control, including majority-owned subsidiaries and minority-owned entities such as limited partnerships in which the Company is the general partner, and variable interest entities in which the Company is considered the primary beneficiary. See Note 5 for more information on the Company's consolidated variable interest entities. The Company's Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Intercompany balances and transactions have been eliminated.

The Company's Gibraltar Life Insurance Company, Ltd. ("Gibraltar Life") consolidated operations use a November 30 fiscal year end for purposes of inclusion in the Company's Consolidated Financial Statements. The Company's consolidated balance sheet data as of December 31, 2016 and 2015, include the assets and liabilities of Gibraltar Life as of November 30 for each respective year. The Company's consolidated income statement data for the years ended December 31, 2016, 2015 and 2014, include Gibraltar Life's results of operations for the twelve months ended November 30 for each respective year.

## Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The most significant estimates include those used in determining deferred policy acquisition costs ("DAC") and related amortization; value of business acquired ("VOBA") and its amortization; amortization of deferred sales inducements ("DSI"); measurement of goodwill and any related impairment; valuation of investments including derivatives and the recognition of other-than-temporary impairments ("OTTI"); future policy benefits including guarantees; pension and other postretirement benefits; provision for income taxes and valuation of deferred tax assets; and accruals for contingent liabilities, including estimates for losses in connection with unresolved legal matters.

## Out of Period Adjustments

During 2016, the Company recorded out of period adjustments resulting in an aggregate net decrease of \$134 million to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" for the year ended December 31, 2016. Such adjustments primarily consisted of a charge of $\$ 141$ million to increase reserves, net of a related increase in DAC, for certain universal life products within the Individual Life business. Management has evaluated the impact of all out of period adjustments, both individually and in the aggregate, and concluded that they are not material to the current annual financial statements or to any previously reported quarterly or annual financial statements.

As previously disclosed in its Annual Report on Form 10-K for the year ended December 31, 2014, during 2014, the Company recorded out of period adjustments resulting in an aggregate net decrease of $\$ 193$ million to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" for the year ended December 31, 2014. Such adjustments were

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

primarily comprised of: 1) a charge of $\$ 58$ million from an increase in reserves for group long-term disability products; 2) a charge of $\$ 43$ million from an increase in the deferred profit liability for certain limited pay business within the Gibraltar Life business; and 3) a charge of $\$ 35$ million from an increase in reserves, net of related amortization of DAC, for certain variable annuities products with optional living benefit guarantees. Subsequent to 2014, the Company identified and recorded additional out of period adjustments of $\$ 41$ million related to 2014, primarily reflecting a benefit of $\$ 62$ million from the release of reserves related to certain variable annuities products with optional living benefit guarantees, net of a related decrease in DAC, offset by the increase in reserves of $\$ 33$ million, net of a related increase in DAC, for certain universal life products within the Individual Life business. Management evaluated the adjustments and concluded that they were not material to any previously reported quarterly or annual financial statements.

For additional information on the impact of these adjustments to the Company's operating segments, see Note 22.

## Reclassifications

Certain amounts in prior years have been reclassified to conform to the current year presentation.

## 2. SIGNIFICANT ACCOUNTING POLICIES AND PRONOUNCEMENTS

## Share-Based Payments

The Company applies the fair value-based measurement method in accounting for share-based payment transactions with employees except for equity instruments held by employee share ownership plans. The Company accounts for excess tax benefits in additional paid-in capital as a single "pool" available to all share-based compensation awards. The Company does not recognize excess tax benefits in additional paid-in capital until the benefits result in a reduction in taxes payable. The Company has elected the "tax law ordering methodology" and has adopted a convention that considers excess tax benefits to be the last portion of a net operating loss carryforward to be utilized.

The Company accounts for non-employee stock options using the fair value method in accordance with authoritative guidance and related interpretations on accounting for equity instruments that are issued to other than employees for acquiring, or in conjunction with selling, goods or services.

## Earnings Per Share

As discussed in Note 1, from demutualization through December 31, 2014, the Company had two separate classes of common stock. Basic earnings per share for those periods was computed by dividing available income attributable to each of the two groups of common shareholders by the respective weighted average number of common shares outstanding for the period. Diluted earnings per share included the effect of all dilutive potential common shares that were outstanding during the period.

As a result of the Class B Repurchase, earnings per share of Common Stock for 2016 and 2015 reflects the consolidated earnings of Prudential Financial. Basic earnings per share is computed by dividing available income attributable to common shareholders by the weighted average number of common shares outstanding for the period. Diluted earnings per share includes the effect of all dilutive potential common shares that were outstanding during the period. See Note 16 for additional information.

As discussed under "Share-Based Payments" above, the Company accounts for excess tax benefits in additional paid-in capital as a single "pool" available to all share-based compensation awards. The Company reflects in assumed proceeds, based on application of the treasury stock method, the excess tax benefits that would be recognized in additional paid-in capital upon exercise or release of the award.

## Investments

The Company's principal investments are fixed maturities; equity securities; commercial mortgage and other loans; policy loans; other long-term investments, including joint ventures (other than operating joint ventures), limited partnerships, and real estate; and short-term investments. The accounting policies related to each are as follows:

Fixed maturities are comprised of bonds, notes and redeemable preferred stock. Fixed maturities classified as "available-for-sale" are carried at fair value. See Note 20 for additional information regarding the determination of fair value. Fixed maturities that the Company has both the positive intent and ability to hold to maturity are carried at amortized cost and classified as "held-to-maturity." The amortized cost of fixed maturities is adjusted for amortization of premiums and accretion of discounts to maturity. Interest income, and amortization of premium and accretion of discount are included in "Net investment income" under the effective yield method. Additionally, prepayment premiums are also included in "Net investment income." For mortgage-backed and asset-backed securities, the effective yield is based on estimated cash flows, including interest rate and prepayment assumptions based on data from widely accepted third-party data sources or internal estimates. In addition to interest rate and prepayment assumptions, cash flow estimates also vary based on other assumptions regarding the underlying collateral, including default rates and changes in value. These assumptions can significantly impact income recognition and the amount of OTTI recognized in earnings and other comprehensive income. For high credit quality mortgage-backed and asset-backed securities (those rated AA or above), cash flows are provided quarterly, and the amortized cost and effective yield of the securities are adjusted as necessary to reflect historical prepayment experience and changes in estimated future prepayments. The adjustments to amortized cost are recorded as a charge or credit to "Net investment income" in accordance with the retrospective method.

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For mortgage-backed and asset-backed securities rated below AA, or those for which an OTTI has been recorded, the effective yield is adjusted prospectively for any changes in estimated cash flows. See the discussion below on realized investment gains and losses for a description of the accounting for impairments. Unrealized gains and losses on fixed maturities classified as "available-for-sale," net of tax, are included in "Accumulated other comprehensive income (loss)" ("AOCI").
"Trading account assets supporting insurance liabilities, at fair value" includes invested assets that support certain products included in the Retirement and International Insurance segments which are experience-rated, meaning that the investment results associated with these products are expected to ultimately accrue to contractholders. Realized and unrealized gains and losses for these investments are reported in "Other income." Interest and dividend income from these investments is reported in "Net investment income."
"Other trading account assets, at fair value" consists primarily of fixed maturities, equity securities, including certain perpetual preferred stock, and certain derivatives. Realized and unrealized gains and losses on these investments are reported in "Other income," and interest and dividend income from these investments are reported in "Net investment income." See "Derivative Financial Instruments" below for additional information regarding the accounting for derivatives.
"Equity securities available-for-sale, at fair value" is comprised of common stock, mutual fund shares and non-redeemable preferred stock, and are carried at fair value. The associated unrealized gains and losses, net of tax, and the effect on DAC, VOBA, DSI, future policy benefits, policyholders' account balances and policyholders' dividends that would result from the realization of unrealized gains and losses, are included in AOCI. The cost of equity securities is written down to fair value when a decline in value is considered to be other-than-temporary. See the discussion below on realized investment gains and losses for a description of the accounting for impairments. Dividends from these investments are generally recognized in "Net investment income" on the ex-dividend date.
"Commercial mortgage and other loans" consists of commercial mortgage loans, agricultural property loans, loans backed by residential properties, as well as certain other collateralized and uncollateralized loans. Loans backed by residential properties primarily include recourse loans held by the Company's international insurance businesses. Uncollateralized loans primarily represent reverse dual currency loans and corporate loans held by the Company's international insurance businesses.

Commercial mortgage and other loans originated and held for investment are generally carried at unpaid principal balance, net of unamortized deferred loan origination fees and expenses, and net of an allowance for losses. The Company carries certain commercial mortgage loans originated within the Company's commercial mortgage operations at fair value where the fair value option has been elected. Loans held for sale where the Company has not elected the fair value option are carried at the lower of cost or fair value. Commercial mortgage and other loans acquired, including those related to the acquisition of a business, are recorded at fair value when purchased, reflecting any premiums or discounts to unpaid principal balances.

Interest income, and the amortization of the related premiums or discounts, are included in "Net investment income" under the effective yield method. Prepayment fees are also included in "Net investment income."

Impaired loans include those loans for which it is probable that amounts due will not all be collected according to the contractual terms of the loan agreement. The Company defines "past due" as principal or interest not collected at least 30 days past the scheduled contractual due date. Interest received on loans that are past due, including impaired and non-impaired loans as well as loans that were previously modified in a troubled debt restructuring, is either applied against the principal or reported as net investment income based on the Company's assessment as to the collectability of the principal. See Note 4 for additional information about the Company's past due loans.

The Company discontinues accruing interest on loans after the loans become 90 days delinquent as to principal or interest payments, or earlier when the Company has doubts about collectability. When the Company discontinues accruing interest on a loan, any accrued but uncollectible interest on the loan and other loans backed by the same collateral, if any, is charged to interest income in the same period. Generally, a loan is restored to accrual status only after all delinquent interest and principal are brought current and, in the case of loans where the payment of interest has been interrupted for a substantial period, or the loan has been modified, a regular payment performance has been established.

The Company reviews the performance and credit quality of the commercial mortgage and other loan portfolio on an on-going basis. Loans are placed on watch list status based on a predefined set of criteria and are assigned one of two categories. Loans are classified as "closely monitored" when it is determined that there is a collateral deficiency or other credit events that may lead to a potential loss of principal or interest. Loans "not in good standing" are those loans where the Company has concluded that there is a high probability of loss of principal, such as when the loan is delinquent or in the process of foreclosure. As described below, in determining the allowance for losses, the Company evaluates each loan on the watch list to determine if it is probable that amounts due will not be collected according to the contractual terms of the loan agreement.

Loan-to-value and debt service coverage ratios are measures commonly used to assess the quality of commercial mortgage loans. The loan-to-value ratio compares the amount of the loan to the fair value of the underlying property collateralizing the loan, and is commonly expressed as a percentage. Loan-to-value ratios greater than $100 \%$ indicate that the loan amount exceeds the collateral value. A loan-to-value ratio less than $100 \%$ indicates an excess of collateral value over the loan amount. The debt service coverage ratio compares a property's net operating income to its debt service payments. Debt service coverage ratios less than 1.0 times indicate that property operations do not generate enough income to cover the loan's current debt payments. A debt service coverage ratio greater than 1.0 times

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indicates an excess of net operating income over the debt service payments. The values utilized in calculating these ratios are developed as part of the Company's periodic review of the commercial mortgage loan and agricultural property loan portfolios, which includes an internal appraisal of the underlying collateral value. The Company's periodic review also includes a quality re-rating process, whereby the internal quality rating originally assigned at underwriting is updated based on current loan, property and market information using a proprietary quality rating system. The loan-to-value ratio is the most significant of several inputs used to establish the internal credit rating of a loan which in turn drives the allowance for losses. Other key factors considered in determining the internal credit rating include debt service coverage ratios, amortization, loan term, and estimated market value growth rate and volatility for the property type and region. See Note 4 for additional information related to the loan-to-value ratios and debt service coverage ratios related to the Company's commercial mortgage and agricultural loan portfolios.

Loans backed by residential properties and uncollateralized loans are also reviewed periodically. Each loan is assigned an internal or external credit rating. Internal credit ratings take into consideration various factors including financial ratios and qualitative assessments based on non-financial information. In cases where there are personal or third-party guarantors, the credit quality of the guarantor is also reviewed. These factors are used in developing the allowance for losses. Based on the diversity of the loans in these categories and their immateriality, the Company has not disclosed the credit quality indicators related to these loans in Note 4.

For those loans not reported at fair value, the allowance for losses includes a loan specific reserve for each impaired loan that has a specifically identified loss and a portfolio reserve for probable incurred but not specifically identified losses. For impaired commercial mortgage and other loans, the allowances for losses are determined based on the present value of expected future cash flows discounted at the loan's effective interest rate, or based upon the fair value of the collateral if the loan is collateral dependent. The portfolio reserves for probable incurred but not specifically identified losses in the commercial mortgage and agricultural loan portfolios consider the current credit composition of the portfolio based on an internal quality rating, as described above. The portfolio reserves are determined using past loan experience, including historical credit migration, loss probability and loss severity factors by property type. These factors are reviewed and updated as appropriate.

The allowance for losses on commercial mortgage and other loans can increase or decrease from period to period based on the factors noted above. "Realized investment gains (losses), net" includes changes in the allowance for losses and changes in value for loans accounted for under the fair value option. "Realized investment gains (losses), net" also includes gains and losses on sales, certain restructurings, and foreclosures.

When a commercial mortgage or other loan is deemed to be uncollectible, any specific valuation allowance associated with the loan is reversed and a direct write-down of the carrying amount of the loan is made. The carrying amount of the loan is not adjusted for subsequent recoveries in value.

Commercial mortgage and other loans are occasionally restructured in a troubled debt restructuring. These restructurings generally include one or more of the following: full or partial payoffs outside of the original contract terms; changes to interest rates; extensions of maturity; or additions or modifications to covenants. Additionally, the Company may accept assets in full or partial satisfaction of the debt as part of a troubled debt restructuring. When restructurings occur, they are evaluated individually to determine whether the restructuring or modification constitutes a "troubled debt restructuring" as defined by authoritative accounting guidance. If the borrower is experiencing financial difficulty and the Company has granted a concession, the restructuring, including those that involve a partial payoff or the receipt of assets in full satisfaction of the debt is deemed to be a troubled debt restructuring. Based on the Company's credit review process described above, these loans generally would have been deemed impaired prior to the troubled debt restructuring, and specific allowances for losses would have been established prior to the determination that a troubled debt restructuring has occurred.

In a troubled debt restructuring where the Company receives assets in full satisfaction of the debt, any specific valuation allowance is reversed and a direct write-down of the loan is recorded for the amount of the allowance, and any additional loss, net of recoveries, or any gain is recorded for the difference between the fair value of the assets received and the recorded investment in the loan. When assets are received in partial settlement, the same process is followed, and the remaining loan is evaluated prospectively for impairment based on the credit review process noted above. When a loan is restructured in a troubled debt restructuring, the impairment of the loan is remeasured using the modified terms and the loan's original effective yield, and the allowance for loss is adjusted accordingly. Subsequent to the modification, income is recognized prospectively based on the modified terms of the loans in accordance with the income recognition policy noted above. Additionally, the loan continues to be subject to the credit review process noted above.

In situations where a loan has been restructured in a troubled debt restructuring and the loan has subsequently defaulted, this factor is considered when evaluating the loan for a specific allowance for losses in accordance with the credit review process noted above.

See Note 4 for additional information about commercial mortgage and other loans that have been restructured in a troubled debt restructuring.
"Policy loans" are carried at unpaid principal balances. Interest income on policy loans is recognized in "Net investment income" at the contract interest rate when earned. Policy loans are fully collateralized by the cash surrender value of the associated insurance policies.
"Other long-term investments" consists of the Company's non-coupon investments in joint ventures and limited partnerships, other than operating joint ventures, as well as wholly-owned investment real estate and other investments. Joint venture and partnership interests are accounted for using the equity method of accounting, the cost method when the Company's partnership interest is so minor (generally

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less than $3 \%$ ) that it exercises virtually no influence over operating and financial policies, or the fair value option where elected. The Company's income from investments in joint ventures and partnerships accounted for using the equity method or the cost method, other than the Company's investments in operating joint ventures, is included in "Net investment income." The carrying value of these investments is written down, or impaired, to fair value when a decline in value is considered to be other-than-temporary. In applying the equity method or the cost method (including assessment for OTTI), the Company uses financial information provided by the investee, generally on a one to three month lag. For the investments for which the Company has elected the fair value option, the associated realized and unrealized gains and losses are reported in "Other income." The Company consolidates joint ventures and limited partnerships in certain other instances where it is deemed to exercise control, or is considered the primary beneficiary of a variable interest entity. See Note 5 for additional information about variable interest entities.

The Company's wholly-owned investment real estate consists of real estate which the Company has the intent to hold for the production of income as well as real estate held for sale. Real estate which the Company has the intent to hold for the production of income is carried at depreciated cost less any writedowns to fair value for impairment losses and is reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. Real estate held for sale is carried at the lower of depreciated cost or fair value less estimated selling costs and is not further depreciated once classified as such. An impairment loss is recognized when the carrying value of the investment real estate exceeds the estimated undiscounted future cash flows (excluding interest charges) from the investment. At that time, the carrying value of the investment real estate is written down to fair value. Decreases in the carrying value of investment real estate held for the production of income due to OTTI are recorded in "Realized investment gains (losses), net." Depreciation on real estate held for the production of income is computed using the straight-line method over the estimated useful lives of the properties and is included in "Net investment income." In the period a real estate investment is deemed held for sale and meets all of the discontinued operation criteria, the Company reports all related net investment income and any resulting investment gains and losses as discontinued operations for all periods presented.
"Short-term investments" primarily consist of highly liquid debt instruments with a maturity of twelve months or less and greater than three months when purchased, other than those debt instruments meeting this definition that are included in "Trading account assets supporting insurance liabilities, at fair value." These investments are generally carried at fair value and include certain money market investments, funds managed similar to regulated money market funds, short-term debt securities issued by government-sponsored entities and other highly liquid debt instruments.

Realized investment gains (losses) are computed using the specific identification method with the exception of some of the Company's International Insurance businesses' portfolios, where the average cost method is used. Realized investment gains and losses are generated from numerous sources, including the sales of fixed maturity securities, equity securities, investments in joint ventures and limited partnerships and other types of investments, as well as adjustments to the cost basis of investments for net OTTI recognized in earnings. Realized investment gains and losses also reflect changes in the allowance for losses on commercial mortgage and other loans, fair value changes on commercial mortgage loans carried at fair value, and fair value changes on embedded derivatives and free-standing derivatives that do not qualify for hedge accounting treatment. See "Derivative Financial Instruments" below for additional information regarding the accounting for derivatives.

The Company's available-for-sale and held-to-maturity securities with unrealized losses are reviewed quarterly to identify OTTI in value. In evaluating whether a decline in value is other-than-temporary, the Company considers several factors including, but not limited to the following: (1) the extent and the duration of the decline; (2) the reasons for the decline in value (credit event, currency or interest-rate related, including general credit spread widening); and (3) the financial condition of and near-term prospects of the issuer. With regard to available-for-sale equity securities, the Company also considers the ability and intent to hold the investment for a period of time to allow for a recovery of value. When it is determined that a decline in value of an equity security is other-than-temporary, the carrying value of the equity security is reduced to its fair value, with a corresponding charge to earnings.

An OTTI is recognized in earnings for a debt security in an unrealized loss position when either (1) the Company has the intent to sell the debt security or (2) it is more likely than not the Company will be required to sell the debt security before its anticipated recovery. For all debt securities in unrealized loss positions that do not meet either of these two criteria, the Company analyzes its ability to recover the amortized cost by comparing the net present value of projected future cash flows with the amortized cost of the security. The net present value is calculated by discounting the Company's best estimate of projected future cash flows at the effective interest rate implicit in the debt security prior to impairment. The Company may use the estimated fair value of collateral as a proxy for the net present value if it believes that the security is dependent on the liquidation of collateral for recovery of its investment. If the net present value is less than the amortized cost of the investment, an OTTI is recognized. In addition to the above mentioned circumstances, the Company also recognizes an OTTI in earnings when a non-functional currency denominated security in an unrealized loss position due to currency exchange rates approaches maturity.

When an OTTI of a debt security has occurred, the amount of the OTTI recognized in earnings depends on whether the Company intends to sell the security or more likely than not will be required to sell the security before recovery of its amortized cost basis. If the debt security meets either of these two criteria or the unrealized losses due to changes in foreign currency exchange rates are not expected to be recovered before maturity, the OTTI recognized in earnings is equal to the entire difference between the security's amortized cost basis and its fair value at the impairment measurement date. For OTTI of debt securities that do not meet these criteria, the net amount recognized in earnings is equal to the difference between the amortized cost of the debt security and its net present value calculated as described above. Any difference between the fair value and the net present value of the debt security at the impairment measurement date is recorded in "Other comprehensive income (loss)." Unrealized gains or losses on securities for which an OTTI has been recognized in earnings is tracked as a separate component of AOCI.

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The split between the amount of an OTTI recognized in other comprehensive income (loss) and the net amount recognized in earnings for debt securities is driven principally by assumptions regarding the amount and timing of projected cash flows. For mortgage-backed and asset-backed securities, cash flow estimates consider the payment terms of the underlying assets backing a particular security, including interest rate and prepayment assumptions based on data from widely accepted third-party data sources or internal estimates. In addition to interest rate and prepayment assumptions, cash flow estimates also include other assumptions regarding the underlying collateral including default rates and recoveries, which vary based on the asset type and geographic location, as well as the vintage year of the security. For structured securities, the payment priority within the tranche structure is also considered. For all other debt securities, cash flow estimates are driven by assumptions regarding probability of default and estimates regarding timing and amount of recoveries associated with a default. The Company has developed these estimates using information based on its historical experience as well as using market observable data, such as industry analyst reports and forecasts, sector credit ratings and other data relevant to the collectability of a security, such as the general payment terms of the security and the security's position within the capital structure of the issuer.

The new cost basis of an impaired security is not adjusted for subsequent increases in estimated fair value. In periods subsequent to the recognition of an OTTI, the impaired security is accounted for as if it had been purchased on the measurement date of the impairment. For debt securities, the discount (or reduced premium) based on the new cost basis may be accreted into net investment income in future periods, including increases in cash flow on a prospective basis. In certain cases where there are decreased cash flow expectations, the security is reviewed for further cash flow impairments.

Unrealized investment gains and losses are also considered in determining certain other balances, including DAC, VOBA, DSI, certain future policy benefits, policyholders' account balances, policyholders' dividends and deferred tax assets or liabilities. These balances are adjusted, as applicable, for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in AOCI. Each of these balances is discussed in greater detail below.

## Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from banks, certain money market investments, funds managed similar to regulated money market funds, and other debt instruments with maturities of three months or less when purchased, other than cash equivalents that are included in "Trading account assets supporting insurance liabilities, at fair value."

## DAC

Costs that are related directly to the successful acquisition of new and renewal insurance and annuity business are deferred to the extent such costs are deemed recoverable from future profits. Such DAC primarily includes commissions, costs of policy issuance and underwriting, and certain other expenses that are directly related to successfully negotiated contracts. In each reporting period, capitalized DAC is amortized to "Amortization of DAC," net of the accrual of imputed interest on DAC balances. DAC is subject to periodic recoverability testing. DAC, for applicable products, is adjusted for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in AOCI.

For traditional participating life insurance included in the Closed Block, DAC is amortized over the expected life of the contracts in proportion to gross margins based on historical and anticipated future experience, which is evaluated regularly. The effect of changes in estimated gross margins on unamortized DAC is reflected in the period such estimated gross margins are revised. DAC related to universal and variable life products and fixed and variable deferred annuity products are generally deferred and amortized over the expected life of the contracts in proportion to gross profits arising principally from investment margins, mortality and expense margins, and surrender charges, based on historical and anticipated future experience, which is updated periodically. The Company uses a reversion to the mean approach for equities to derive future equity return assumptions. However, if the projected equity return calculated using this approach is greater than the maximum equity return assumption, the maximum equity return is utilized. Gross profits also include impacts from the embedded derivatives associated with certain of the optional living benefit features of the Company's variable annuity contracts and related hedging activities. The effect of changes to total gross profits on unamortized DAC is reflected in the period such total gross profits are revised. DAC related to non-participating traditional individual life insurance and longevity reinsurance contracts is amortized in proportion to gross premiums.

For group annuity contracts (other than single premium group annuities), acquisition costs are generally deferred and amortized over the expected life of the contracts in proportion to gross profits. For group corporate-, bank- and trust-owned life insurance contracts, acquisition costs are generally deferred and amortized in proportion to lives insured. For single premium immediate annuities with life contingencies, single premium group annuities, including non-participating group annuity contracts, and single premium structured settlements with life contingencies, all acquisition costs are charged to expense immediately because generally all premiums are received at the inception of the contract. For funding agreement notes contracts, single premium structured settlement contracts without life contingencies, and single premium immediate annuities without life contingencies, acquisition expenses are deferred and amortized over the expected life of the contracts using the interest method. For other group life and disability insurance contracts and guaranteed investment contracts, acquisition costs are expensed as incurred.

For some products, policyholders can elect to modify product benefits, features, rights or coverages by exchanging a contract for a new contract or by amendment, endorsement, or rider to a contract, or by the election of a feature or coverage within a contract. These transactions are known as internal replacements. If policyholders surrender traditional life insurance policies in exchange for life insurance policies that do not have fixed and guaranteed terms, the Company immediately charges to expense the remaining unamortized DAC on the

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surrendered policies. For other internal replacement transactions, except those that involve the addition of a nonintegrated contract feature that does not change the existing base contract, the unamortized DAC is immediately charged to expense if the terms of the new policies are not substantially similar to those of the former policies. If the new terms are substantially similar to those of the earlier policies, the DAC is retained with respect to the new policies and amortized over the expected life of the new policies. See Note 6 for additional information regarding DAC.

## VOBA

As a result of certain acquisitions and the application of purchase accounting, the Company reports a financial asset representing VOBA. VOBA represents an adjustment to the stated value of inforce insurance contract liabilities to present them at fair value, determined as of the acquisition date. VOBA balances are subject to recoverability testing, in the manner in which they were acquired. The Company has established a VOBA asset primarily for its acquired life insurance products, accident and health products with fixed benefits, deferred annuity contracts, and defined contribution and defined benefit businesses. As of December 31, 2016, the majority of the VOBA balance relates to the 2011 acquisition of AIG Star Life Insurance Co., Ltd, AIG Edison Life Insurance Company, AIG Financial Assurance Japan K.K. and AIG Edison Service Co., Ltd. (collectively, the "Star and Edison Businesses") and the 2013 acquisition of The Hartford Financial Services Group's individual life insurance business ("the Hartford Life Business"). The Company amortizes VOBA over the anticipated life of the acquired contracts using the same methodology and assumptions used to amortize DAC. The Company records amortization of VOBA in "General and administrative expenses." VOBA, for applicable products, is adjusted for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in AOCI. See Note 8 for additional information regarding VOBA.

## Separate Account Assets and Liabilities

Separate account assets are reported at fair value and represent segregated funds that are invested for certain policyholders, pension funds and other customers. The assets consist primarily of equity securities, fixed maturities, real estate-related investments, real estate mortgage loans, short-term investments and derivative instruments. The assets of each account are legally segregated and are not subject to claims that arise out of any other business of the Company. Investment risks associated with market value changes are borne by the customers, except to the extent of minimum guarantees made by the Company with respect to certain accounts. See Note 11 for additional information regarding separate account arrangements with contractual guarantees. Separate account liabilities primarily represent the contractholder's account balance in separate account assets and to a lesser extent borrowings of the separate account, and will be equal and offsetting to total separate account assets. The investment income and realized investment gains or losses from separate account assets generally accrue to the policyholders and are not included in the Company's results of operations. Mortality, policy administration and surrender charges assessed against the accounts are included in "Policy charges and fee income." Asset management fees charged to the accounts are included in "Asset management and service fees." Seed money that the Company invests in separate accounts is reported in the appropriate general account asset line. Investment income and realized investment gains or losses from seed money invested in separate accounts accrues to the Company and is included in the Company's results of operations.

## Other Assets and Other Liabilities

Other assets consist primarily of prepaid pension benefit costs, certain restricted assets, trade receivables, goodwill and other intangible assets, DSI, the Company's investments in operating joint ventures, property and equipment, reinsurance recoverables, and receivables resulting from sales of securities that had not yet settled at the balance sheet date. Other liabilities consist primarily of trade payables, pension and other employee benefit liabilities, derivative liabilities, reinsurance payables, and payables resulting from purchases of securities that had not yet settled at the balance sheet date.

Property and equipment are carried at cost less accumulated depreciation. Depreciation is determined using the straight-line method over the estimated useful lives of the related assets, which generally range from 3 to 40 years.

As a result of certain acquisitions, the Company recognizes an asset for goodwill representing the excess of cost over the net fair value of the assets acquired and liabilities assumed. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. A reporting unit is an operating segment or a unit one level below the operating segment, if discrete financial information is prepared and regularly reviewed by management at that level. Once goodwill has been assigned to reporting units, it no longer retains its association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or organically grown, are available to support the value of the goodwill.

The Company tests goodwill for impairment annually as of December 31 and more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Accounting guidance provides for an optional qualitative assessment for testing goodwill impairment that may allow companies to skip the quantitative two-step test. The Company has elected the quantitative two-step test that is performed at the reporting unit level. The first step, used to identify potential impairment, involves comparing each reporting unit's fair value to its carrying value including goodwill. If the fair value of a reporting unit exceeds its carrying value, the applicable goodwill is considered not to be impaired. If the carrying value exceeds fair value, there is an indication of a potential impairment and the second step of the test is performed to measure the amount of impairment.

The second step involves calculating an implied fair value of goodwill for each reporting unit for which the first step indicated impairment. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business

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combination, which is the excess of the fair value of the reporting unit, as determined in the first step, over the aggregate fair values of the individual assets, liabilities and identifiable intangibles as if the reporting unit was being acquired in a business combination. If the implied fair value of goodwill in the "pro forma" business combination accounting as described above exceeds the goodwill assigned to the reporting unit, there is no impairment. If the goodwill assigned to a reporting unit exceeds the implied fair value of the goodwill, an impairment charge is recorded in "General and administrative expenses" for the excess. An impairment loss recognized cannot exceed the amount of goodwill assigned to a reporting unit, and the loss establishes a new basis in the goodwill. Subsequent reversal of goodwill impairment losses is not permitted. Management is required to make significant estimates in determining the fair value of a reporting unit including, but not limited to: projected earnings, comparative market multiples, and the risk rate at which future net cash flows are discounted.

The Company offered various types of sales inducements to policyholders related to fixed and variable deferred annuity contracts. The Company defers sales inducements and amortizes them over the anticipated life of the policy using the same methodology and assumptions used to amortize DAC. Sales inducement balances are subject to periodic recoverability testing. The Company records amortization of DSI in "Interest credited to policyholders' account balances." DSI, for applicable products, is adjusted for the impact of unrealized gains or losses on investments as if these gains or losses had been realized, with corresponding credits or charges included in AOCI. See Note 11 for additional information regarding sales inducements.

The majority of the Company's reinsurance recoverables and payables are associated with the reinsurance arrangements used to effect the Company's acquisition of the retirement business of CIGNA and the Hartford Life Business. The remaining amounts relate to other reinsurance arrangements entered into by the Company. For each of its reinsurance contracts, the Company determines if the contract provides indemnification against loss or liability relating to insurance risk in accordance with applicable accounting standards. The Company reviews all contractual features, particularly those that may limit the amount of insurance risk to which the reinsurer is subject or features that delay the timely reimbursement of claims. See Note 13 for additional information about the Company's reinsurance arrangements.

Identifiable intangible assets primarily include customer relationships and mortgage servicing rights and are recorded net of accumulated amortization. The Company tests identifiable intangible assets for impairment on an annual basis as of December 31 of each year or whenever events or circumstances suggest that the carrying value of an identifiable intangible asset may exceed the sum of the undiscounted cash flows expected to result from its use and eventual disposition. If this condition exists and the carrying value of an identifiable intangible asset exceeds its fair value, the excess is recognized as an impairment and is recorded as a charge against net income. Measuring intangible assets requires the use of estimates. Significant estimates include the projected net cash flow attributable to the intangible asset and the risk rate at which future net cash flows are discounted for purposes of estimating fair value, as applicable. See Note 9 for additional information regarding identifiable intangible assets.

Investments in operating joint ventures are generally accounted for under the equity method. The carrying value of these investments is written down, or impaired, to fair value when a decline in value is considered to be other-than-temporary. See Note 7 for additional information on investments in operating joint ventures.

## Future Policy Benefits

The Company's liability for future policy benefits is primarily comprised of the present value of estimated future payments to or on behalf of policyholders, where the timing and amount of payment depends on policyholder mortality or morbidity, less the present value of future net premiums. For individual traditional participating life insurance products, the mortality and interest rate assumptions applied are those used to calculate the policies' guaranteed cash surrender values. For life insurance, other than individual traditional participating life insurance, and annuity and disability products, expected mortality and morbidity are generally based on Company experience, industry data and/or other factors. Interest rate assumptions are based on factors such as market conditions and expected investment returns. Although mortality, morbidity and interest rate assumptions are "locked-in" upon the issuance of new insurance or annuity business with fixed and guaranteed terms, significant changes in experience or assumptions may require the Company to provide for expected future losses on a product by establishing premium deficiency reserves. Premium deficiency reserves are established, if necessary, when the liability for future policy benefits plus the present value of expected future gross premiums are determined to be insufficient to provide for expected future policy benefits and expenses. Premium deficiency reserves do not include a provision for the risk of adverse deviation. In determining if a premium deficiency related to short-duration contracts exists, the Company considers, among other factors, anticipated investment income. Any adjustments to future policy benefit reserves related to net unrealized gains on securities classified as available-for-sale are included in AOCI. In certain instances, the policyholder liability for a particular line of business may not be deficient in the aggregate to trigger loss recognition, but the pattern of earnings may be such that profits are expected to be recognized in earlier years followed by losses in later years. In these situations, accounting standards require that an additional liability (Profits Followed by Losses or "PFL" liability) be recognized by an amount necessary to sufficiently offset the losses that would be recognized in later years. Currently, PFL liabilities are predominantly associated with certain universal life contracts that measure GAAP reserves using a dynamic approach and accordingly, are updated each quarter using current inforce and market data and as part of the annual assumption update. See Note 10 for additional information regarding future policy benefits.

The Company's liability for future policy benefits also includes a liability for unpaid claims and claim adjustment expenses. The Company does not establish claim liabilities until a loss has been incurred. However, unpaid claims and claim adjustment expenses include estimates of claims that the Company believes have been incurred but have not yet been reported as of the balance sheet date. The Company's liability for future policy benefits also includes net liabilities for guarantee benefits related to certain long-duration life and annuity contracts, which are discussed more fully in Note 11, and deferred profits.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Policyholders' Account Balances

The Company's liability for policyholders' account balances represents the contract value that has accrued to the benefit of the policyholder as of the balance sheet date. This liability is primarily associated with the accumulated account deposits, plus interest credited, less policyholder withdrawals and other charges assessed against the account balance, as applicable. These policyholders' account balances also include provision for benefits under non-life contingent payout annuities and certain unearned revenues. See Note 10 for additional information regarding policyholders' account balances.

## Policyholders' Dividends

The Company's liability for policyholders' dividends includes its dividends payable to policyholders and its policyholder dividend obligation associated with the participating policies included in the Closed Block. The dividends payable for participating policies included in the Closed Block are determined at the end of each year for the following year by the Board of Directors of the Prudential Insurance Company of America ("Prudential Insurance") based on its statutory results, capital position, ratings, and the emerging experience of the Closed Block. The policyholder dividend obligation represents amounts expected to be paid to Closed Block policyholders as an additional policyholder dividend unless otherwise offset by future Closed Block performance. Any adjustments to the policyholder dividend obligation related to net unrealized gains (losses) on securities classified as available-for-sale are included in AOCI. For additional information on the policyholder dividend obligation, see Note 12. The dividends payable for policies other than the participating policies included in the Closed Block include dividends payable in accordance with certain group and individual insurance policies.

## Securities repurchase and resale agreements and securities loaned transactions

Securities repurchase and resale agreements and securities loaned transactions are used primarily to earn spread income, to borrow funds, or to facilitate trading activity. As part of securities repurchase agreements or securities loaned transactions, the Company transfers U.S. and foreign debt and equity securities, as well as U.S. government and government agency securities, and receives cash as collateral. As part of securities resale agreements, the Company invests cash and receives as collateral U.S. government securities or other debt securities. For securities repurchase agreements and securities loaned transactions used to earn spread income, the cash received is typically invested in cash equivalents, short-term investments or fixed maturities.

Securities repurchase and resale agreements that satisfy certain criteria are treated as secured borrowing or secured lending arrangements. These agreements are carried at the amounts at which the securities will be subsequently resold or reacquired, as specified in the respective transactions. For securities purchased under agreements to resell, the Company's policy is to take possession or control of the securities either directly or through a third-party custodian. These securities are valued daily and additional securities or cash collateral is received, or returned, when appropriate to protect against credit exposure. Securities to be resold are the same, or substantially the same, as the securities received. The majority of these transactions are with large brokerage firms and large banks. For securities sold under agreements to repurchase, the market value of the securities to be repurchased is monitored, and additional collateral is obtained where appropriate, to protect against credit exposure. The Company obtains collateral in an amount at least equal to $95 \%$ of the fair value of the securities sold. Securities to be repurchased are the same, or substantially the same, as those sold. The majority of these transactions are with highly rated money market funds. Income and expenses related to these transactions executed within the insurance companies used to earn spread income are reported as "Net investment income;" however, for transactions used for funding purposes, the associated borrowing cost is reported as interest expense (included in "General and administrative expenses"). Income and expenses related to these transactions executed within the Company's derivative operations are reported in "Other income."

Securities loaned transactions are treated as financing arrangements and are recorded at the amount of cash received. The Company obtains collateral in an amount equal to $102 \%$ and $105 \%$ of the fair value of the domestic and foreign securities, respectively. The Company monitors the market value of the securities loaned on a daily basis with additional collateral obtained as necessary. Substantially all of the Company's securities loaned transactions are with large brokerage firms and large banks. Income and expenses associated with securities loaned transactions used to earn spread income are reported as "Net investment income;" however, for securities loaned transactions used for funding purposes the associated rebate is reported as interest expense (included in "General and administrative expenses").

## Contingent Liabilities

Amounts related to contingent liabilities are accrued if it is probable that a liability has been incurred and an amount is reasonably estimable. Management evaluates whether there are incremental legal or other costs directly associated with the ultimate resolution of the matter that are reasonably estimable and, if so, they are included in the accrual.

## Insurance Revenue and Expense Recognition

Premiums from individual life products, other than universal and variable life contracts, and health insurance and long-term care products are recognized when due. When premiums are due over a significantly shorter period than the period over which benefits are provided, any gross premium in excess of the net premium (i.e., the portion of the gross premium required to provide for all expected future benefits and expenses) is generally deferred and recognized into revenue in a constant relationship to insurance in force. Benefits are recorded as an expense when they are incurred. A liability for future policy benefits is recorded when premiums are recognized using the net level premium method.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Premiums from non-participating group annuities with life contingencies, single premium structured settlements with life contingencies and single premium immediate annuities with life contingencies are recognized when due. When premiums are due over a significantly shorter period than the period over which benefits are provided, any gross premium in excess of the net premium is generally deferred and recognized into revenue based on expected future benefit payments. Benefits are recorded as an expense when they are incurred. A liability for future policy benefits is recorded when premiums are recognized using the net level premium method.

Certain individual annuity contracts provide the contractholder a guarantee that the benefit received upon death or annuitization will be no less than a minimum prescribed amount. These benefits are accounted for as insurance contracts. The Company also provides contracts with certain living benefits which are considered embedded derivatives. See Note 11 for additional information regarding these contracts.

Amounts received as payment for universal or variable group and individual life contracts, deferred fixed or variable annuities, structured settlements and other contracts without life contingencies, and participating group annuities are reported as deposits to "Policyholders' account balances" and/or "Separate account liabilities." Revenues from these contracts are reflected in "Policy charges and fee income" consisting primarily of fees assessed during the period against the policyholders' account balances for mortality and other benefit charges, policy administration charges and surrender charges. In addition to fees, the Company earns investment income from the investment of deposits in the Company's general account portfolio. Fees assessed that represent compensation to the Company for services to be provided in future periods and certain other fees are generally deferred and amortized into revenue over the life of the related contracts in proportion to estimated gross profits. Benefits and expenses for these products include claims in excess of related account balances, expenses of contract administration, interest credited to policyholders' account balances and amortization of DAC, DSI and VOBA.

For group life, other than universal and variable group life contracts, and disability insurance, premiums are generally recognized over the period to which the premiums relate in proportion to the amount of insurance protection provided. Claim and claim adjustment expenses are recognized when incurred.

## Asset Management and Service Fees

"Asset management and service fees" principally includes asset-based asset management fees, which are recognized in the period in which the services are performed.

In certain asset management fee arrangements, the Company is entitled to receive performance-based incentive fees when the return on assets under management exceeds certain benchmark returns or other performance targets. The Company may be required to return all, or part, of such performance-based incentive fee depending on future performance of these assets relative to performance benchmarks. The Company records performance-based incentive fee revenue when the contractual terms of the asset management fee arrangement have been satisfied such that the performance fee is no longer subject to clawback or contingency. Under this principle the Company records a deferred performance-based incentive fee liability to the extent it receives cash related to the performance-based incentive fee prior to meeting the revenue recognition criteria delineated above.

## Other Income

"Other income" includes realized and unrealized gains or losses from investments classified as "trading" such as "Trading account assets supporting insurance liabilities" and "Other trading account assets," short-term investments that are marked-to-market through "Other income," "Other long-term investments" for which the Company has elected the fair value option, and consolidated entities that follow specialized investment company fair value accounting.
"Other income" also includes gains and losses primarily related to the remeasurement of foreign currency denominated assets and liabilities, as discussed in more detail under "Foreign Currency" below.

## Foreign Currency

Assets, liabilities and results of foreign operations are recorded based on the functional currency of each foreign operation. The determination of the functional currency is based on economic facts and circumstances pertaining to each foreign operation. With the exception of our Japanese operations, where multiple functional currencies exist, the local currencies of our foreign operations are typically their functional currencies. See Note 22 for additional information.

Assets and liabilities of foreign operations and subsidiaries reported in currencies other than U.S. dollars are translated at the exchange rate in effect at the end of the period. Revenues, benefits and other expenses are translated at the average rate prevailing during the period. The effects of translating the statements of operations and financial position of non-U.S. entities with functional currencies other than the U.S. dollar are included, net of related qualifying hedge gains and losses and income taxes, in AOCI. Gains and losses resulting from the remeasurement of foreign currency transactions are reported in either AOCI or current earnings in "Other income" depending on the nature of the related foreign currency denominated asset or liability.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Derivative Financial Instruments

Derivatives are financial instruments whose values are derived from interest rates, foreign exchange rates, financial indices, values of securities or commodities, credit spreads, market volatility, expected returns, and liquidity. Values can also be affected by changes in estimates and assumptions, including those related to counterparty behavior and non-performance risk ("NPR") used in valuation models. Derivative financial instruments generally used by the Company include swaps, futures, forwards and options and may be exchange-traded or contracted in the over-the-counter ("OTC") market. Derivative positions are carried at fair value, generally by obtaining quoted market prices or through the use of valuation models.

Derivatives are used to manage the interest rate and currency characteristics of assets or liabilities and to mitigate volatility of expected non-U.S. earnings and net investments in foreign operations resulting from changes in currency exchange rates. Additionally, derivatives may be used to seek to reduce exposure to interest rate, credit, foreign currency and equity risks associated with assets held or expected to be purchased or sold, and liabilities incurred or expected to be incurred. As discussed in detail below and in Note 21, all realized and unrealized changes in fair value of derivatives are recorded in current earnings, with the exception of the effective portion of cash flow hedges and effective hedges of net investments in foreign operations. The Company may also enter into intercompany derivatives, the results of which ultimately eliminate in consolidation over the term of the instrument; however, where applicable, derivative results are included in business gross profits which may impact the pattern by which DAC and other assets are amortized. Cash flows from derivatives are reported in the operating, investing, or financing activities sections in the Consolidated Statements of Cash Flows based on the nature and purpose of the derivative.

Derivatives are recorded either as assets, within "Other trading account assets, at fair value" or "Other long-term investments," or as liabilities, within "Other liabilities," except for embedded derivatives which are recorded with the associated host contract. The Company nets the fair value of all derivative financial instruments with counterparties for which a master netting arrangement has been executed.

The Company designates derivatives as either (1) a hedge of the fair value of a recognized asset or liability or unrecognized firm commitment ("fair value" hedge); (2) 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); (3) a foreign currency fair value or cash flow hedge ("foreign currency" hedge); (4) a hedge of a net investment in a foreign operation; or (5) a derivative that does not qualify for hedge accounting.

To qualify for hedge accounting treatment, a derivative must be highly effective in mitigating the designated risk of the hedged item. Effectiveness of the hedge is formally assessed at inception and throughout the life of the hedging relationship. Even if a derivative qualifies for hedge accounting treatment, there may be an element of ineffectiveness of the hedge. Under such circumstances, the ineffective portion is recorded in "Realized investment gains (losses), net."

The Company formally documents at inception all relationships between hedging instruments and hedged items, as well as its riskmanagement objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives designated as fair value, cash flow, or foreign currency hedges to specific assets and liabilities on the balance sheet or to specific firm commitments or forecasted transactions. Hedges of a net investment in a foreign operation are linked to the specific foreign operation.

When a derivative is designated as a fair value hedge and is determined to be highly effective, changes in its fair value, along with changes in the fair value of the hedged asset or liability (including losses or gains on firm commitments), are reported on a net basis in the Consolidated Statements of Operations, generally in "Realized investment gains (losses), net." When swaps are used in hedge accounting relationships, periodic settlements are recorded in the same Consolidated Statements of Operations line as the related settlements of the hedged items.

When a derivative is designated as a cash flow hedge and is determined to be highly effective, changes in its fair value are recorded in AOCI until earnings are affected by the variability of cash flows being hedged (e.g., when periodic settlements on a variable-rate asset or liability are recorded in earnings). At that time, the related portion of deferred gains or losses on the derivative instrument is reclassified and reported in the Consolidated Statements of Operations line item associated with the hedged item.

When a derivative is designated as a foreign currency hedge and is determined to be highly effective, changes in its fair value are recorded either in current period earnings if the hedge transaction is a fair value hedge (e.g., a hedge of a recognized foreign currency asset or liability) or in AOCI if the hedge transaction is a cash flow hedge (e.g., a foreign currency denominated forecasted transaction). When a derivative is used as a hedge of a net investment in a foreign operation, its change in fair value, to the extent effective as a hedge, is accounted for in the same manner as a translation adjustment (i.e., reported in the cumulative translation adjustment account within AOCI).

If it is determined that a derivative no longer qualifies as an effective fair value or cash flow hedge or management removes the hedge designation, the derivative will continue to be carried on the balance sheet at its fair value, with changes in fair value recognized currently in "Realized investment gains (losses), net." In this scenario, the hedged asset or liability under a fair value hedge will no longer be adjusted for changes in fair value and the existing basis adjustment is amortized to the Consolidated Statements of Operations line associated with the asset or liability. The component of AOCI related to discontinued cash flow hedges is reclassified to the Consolidated Statements of Operations line associated with the hedged cash flows consistent with the earnings impact of the original hedged cash flows.

When hedge accounting is discontinued because the hedged item no longer meets the definition of a firm commitment, or because it is probable that the forecasted transaction will not occur by the end of the specified time period, the derivative will continue to be carried on

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

the balance sheet at its fair value, with changes in fair value recognized currently in "Realized investment gains (losses), net." Any asset or liability that was recorded pursuant to recognition of the firm commitment is removed from the balance sheet and recognized currently in "Realized investment gains (losses), net." Gains and losses that were in AOCI pursuant to the cash flow hedge of a forecasted transaction are recognized immediately in "Realized investment gains (losses), net."

If a derivative does not qualify for hedge accounting, all changes in its fair value, including net receipts and payments, are included in "Realized investment gains (losses), net" without considering changes in the fair value of the economically associated assets or liabilities.

The Company is a party to financial instruments that contain derivative instruments that are "embedded" in the financial instruments. At inception, the Company assesses whether the economic characteristics of the embedded instrument are clearly and closely related to the economic characteristics of the remaining component of the financial instrument (i.e., the host contract) and whether a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument. When it is determined that (1) the embedded instrument possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract, and (2) a separate instrument with the same terms would qualify as a derivative instrument, the embedded instrument qualifies as an embedded derivative that is separated from the host contract, carried at fair value, and changes in its fair value are included in "Realized investment gains (losses), net." For certain financial instruments that contain an embedded derivative that otherwise would need to be bifurcated and reported at fair value, the Company may elect to classify the entire instrument as a trading account asset and report it within "Other trading account assets, at fair value."

## Short-Term and Long-Term Debt

Liabilities for short-term and long-term debt are primarily carried at an amount equal to unpaid principal balance, net of unamortized discount or premium and debt issue costs. Original-issue discount or premium and debt-issue costs are recognized as a component of interest expense over the period the debt is expected to be outstanding, using the interest method of amortization. Interest expense is generally presented within "General and administrative expenses" in the Company's Consolidated Statements of Operations. Interest expense may also be reported within "Net investment income" for certain activity, as prescribed by specialized industry guidance. Shortterm debt is debt coming due in the next twelve months, including that portion of debt otherwise classified as long-term. The short-term debt caption may exclude short-term debt items the Company intends to refinance on a long-term basis in the near-term. See Note 14 for additional information regarding short-term and long-term debt.

## Income Taxes

The Company and its includible domestic subsidiaries file a consolidated federal income tax return that includes both life insurance companies and non-life insurance companies. Non-includible domestic subsidiaries file separate individual corporate tax returns. Subsidiaries operating outside the U.S. are taxed, and income tax expense is recorded, based on applicable foreign statutes. See Note 19 for a discussion of certain non-U.S. jurisdictions for which the Company assumes repatriation of earnings to the U.S.

Deferred income taxes are recognized, based on enacted rates, when assets and liabilities have different values for financial statement and tax reporting purposes. A valuation allowance is recorded to reduce a deferred tax asset to the amount expected to be realized.

Items required by tax regulations to be included in the tax return may differ from the items reflected in the financial statements. As a result, the effective tax rate reflected in the financial statements may be different than the actual rate applied on the tax return. Some of these differences are permanent such as expenses that are not deductible in the Company's tax return, and some differences are temporary, reversing over time, such as valuation of insurance reserves. Temporary differences create deferred tax assets and liabilities. Deferred tax assets generally represent items that can be used as a tax deduction or credit in future years for which the Company has already recorded the tax benefit in the Company's Consolidated Statements of Operations. Deferred tax liabilities generally represent tax expense recognized in the Company's financial statements for which payment has been deferred, or expenditures for which the Company has already taken a deduction in the Company's tax return but have not yet been recognized in the Company's financial statements.

The application of U.S. GAAP requires the Company to evaluate the recoverability of the Company's deferred tax assets and establish a valuation allowance if necessary to reduce the Company's deferred tax assets to an amount that is more likely than not expected to be realized. Considerable judgment is required in determining whether a valuation allowance is necessary, and if so, the amount of such valuation allowance. See Note 19 for a discussion of factors considered when evaluating the need for a valuation allowance.
U.S. GAAP prescribes a comprehensive model for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that a company has taken or expects to take on tax returns. The application of this guidance is a two-step process, the first step being recognition. The Company determines whether it is more likely than not, based on the technical merits, that the tax position will be sustained upon examination. If a tax position does not meet the more likely than not recognition threshold, the benefit of that position is not recognized in the financial statements. The second step is measurement. The Company measures the tax position as the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate resolution with a taxing authority that has full knowledge of all relevant information. This measurement considers the amounts and probabilities of the outcomes that could be realized upon ultimate settlement using the facts, circumstances, and information available at the reporting date.

The Company's liability for income taxes includes the liability for unrecognized tax benefits, interest and penalties which relate to tax years still subject to review by the Internal Revenue Service ("IRS") or other taxing jurisdictions. Audit periods remain open for review

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

until the statute of limitations has passed. Generally, for tax years which produce net operating losses, capital losses or tax credit carryforwards ("tax attributes"), the statute of limitations does not close, to the extent of these tax attributes, until the expiration of the statute of limitations for the tax year in which they are fully utilized. The completion of review or the expiration of the statute of limitations for a given audit period could result in an adjustment to the liability for income taxes. The Company classifies all interest and penalties related to tax uncertainties as income tax expense. See Note 19 for additional information regarding income taxes.

## Recent Accounting Pronouncements

Changes to U.S. GAAP are established by the Financial Accounting Standards Board ("FASB") in the form of accounting standards updates ("ASU") to the FASB Accounting Standards Codification.

The Company considers the applicability and impact of all ASU. ASU listed below include those that have been adopted during the current fiscal year and/or those that have been issued but not yet adopted as of February 17, 2017. ASU not listed below were assessed and determined to be either not applicable or not material.

ASU adopted during year ended December 31, 2016

| Standard | Description | Effective date and method of adoption | Effect on the financial statements or other significant matters |
| :---: | :---: | :---: | :---: |
| ASU 2015-03, <br> Interest - Imputation of Interest (Subtopic 835-30): <br> Simplifying the <br> Presentation of Debt <br> Issuance Costs | The ASU simplifies the presentation of debt issuance costs. The standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. | January 1, 2016 using a retrospective method. | Prior period financial information presented has been adjusted to reflect the retrospective adoption. As a result, "Other assets" and "Long-term debt" as previously reported on the Company's Consolidated Statements of Financial Position as of December 31, 2015 were both reduced by $\$ 133$ million. |
| ASU 2015-02, <br> Consolidation (Topic 810): <br> Amendments to Consolidation Analysis | The ASU modifies the rules regarding consolidation. Specialized standard for limited partnerships and similar legal entities is eliminated and the indefinite deferral for certain investment funds is removed. | January 1, 2016 using a modified retrospective method. | Adoption of the ASU primarily resulted in the deconsolidation of certain of the Company's previously consolidated collateralized loan obligations ("CLOs"), as the Company's asset manager fee arrangements are no longer deemed variable interest in these entities. The Company continues to consolidate CLOs where it retains other economic interests which absorb more than an insignificant amount of the CLOs expected variability. The Company also deconsolidated certain investment structures where it is no longer deemed to be the primary beneficiary as the Company, through its equity ownership, no longer has the obligation to absorb losses of the Variable Interest Entity ("VIE") that could be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The impact to the Company's Consolidated Statements of Financial Position upon adoption of the updated guidance was a reduction of $\$ 5.5$ billion of "Total assets" (including $\$ 5.1$ billion of "Total investments") and $\$ 5.5$ billion of "Total liabilities" (including $\$ 5.1$ billion of "Notes issued by consolidated variable interest entities"), with a $\$ 30$ million decrease in "Noncontrolling interests" and a $\$ 7$ million increase to "Total Prudential Financial, Inc. equity." |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

| Standard |  | Description | Effective date <br> and method of <br> adoption |
| :--- | :--- | :--- | :--- |

ASU issued but not yet adopted as of December 31, 2016

| Standard | Description | Effective date and method of adoption | Effect on the financial statements or other significant matters |
| :---: | :---: | :---: | :---: |
| ASU 2014-09, <br> Revenue from Contracts with Customers (Topic 606) | The ASU is based on the core principle that revenue is recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. The standard also requires additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, and assets recognized from the costs to obtain or fulfill a contract with a customer. Revenue recognition for insurance contracts and financial instruments are explicitly scoped out of the standard. | January 1, 2018 using one of two retrospective application methods (early adoption permitted beginning January 1, 2017). <br> The Company plans to adopt the standard on January 1, 2018 using the modified retrospective application. | Given that insurance contracts and financial instruments are explicitly scoped out of the standard, the Company's assessment has focused on the Asset Management segment. Based on the assessment completed to date, the Company does not expect the adoption of the ASU to have a significant impact on the Asset Management segment's results of operations. |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

| Standard |
| :--- |
| ASU 2016-01, |
| Financial Instruments - |
| Overall (Subtopic 825-10): |
| Recognition and |
| Measurement of Financial |
| Assets and Liabilities |

ASU 2016-09,
Compensation- Stock
Compensation (Topic 718): Improvements to Employee Share- Based Payments Accounting
Description
The ASU revises an entity's
accounting related to the
classification and measurement of
certain equity investments and the
presentation of certain fair value
changes for financial liabilities
measured at fair value. The
standard also amends certain
disclosure requirements associated
with the fair value of financial
instruments. ate and method of adoption
January 1, 2018 using the modified retrospective method. The amendments are to be applied prospectively as they relate to equity investments without readily determinable fair value.

January 1, 2019 The Company is currently assessing the impact of the using the modified retrospective method (with early adoption permitted).

ASU on the Company's Consolidated Financial Statements and Notes to the Consolidated Financial Statements.

The Company does not expect the adoption of the ASU to have a significant impact on the Company's Consolidated Financial Statements and Notes to the Consolidated Financial Statements.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

| Standard | Description | Effective date and method of adoption | Effect on the financial statements or other significant matters |
| :---: | :---: | :---: | :---: |
| ASU 2016-13, <br> Financial InstrumentsCredit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments | This ASU provides a new current expected credit loss model to account for credit losses on certain financial assets and off-balance sheet exposures (e.g., loans held for investment, debt securities held to maturity, reinsurance receivables, net investments in leases and loan commitments). The model requires an entity to estimate lifetime credit losses related to such financial assets and exposures based on relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The standard also modifies the current other-than-temporary impairment standard for available-for-sale debt securities to require the use of an allowance rather than a direct write down of the investment, and replaces existing standard for purchased credit deteriorated loans and debt securities. | January 1, 2020 <br> using the <br> modified <br> retrospective <br> method, however <br> prospective <br> application is <br> required for <br> purchased credit <br> deteriorated <br> assets previously <br> accounted for <br> under ASU <br> 310-30 and for <br> debt securities for <br> which an other- <br> than-temporary- <br> impairment was <br> recognized prior <br> to the date of <br> adoption. Early <br> adoption is <br> permitted <br> beginning <br> January 1, 2019. | The Company is currently assessing the impact of the ASU on the Company's Consolidated Financial Statements and Notes to the Consolidated Financial Statements. |
| ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a Consensus of the Emerging Issues Task Force) | This ASU addresses diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard provides clarity on the treatment of eight specifically defined types of cash inflows and outflows. | January 1, 2018 using the retrospective method (with early adoption permitted provided that all amendments are adopted in the same period). | The Company is currently assessing the impact of the ASU on the Company's Consolidated Financial Statements and Notes to the Consolidated Financial Statements. |
| Update 2016-18, <br> Statement of Cash Flows (Topic 230): Restricted Cash | In November 2016, the FASB issued this ASU to address diversity in practice from entities classifying and presenting transfers between cash and restricted cash as operating, investing, or financing activities, or as a combination of those activities in the Statement of Cash Flows. The ASU requires entities to show the changes in the total of cash, cash equivalents, restricted cash, and restricted cash equivalents in the Statement of Cash Flows. As a result, transfers between such categories will no longer be presented in the | January 1, 2018 using the retrospective method (with early adoption permitted). | The Company is currently assessing the impact of the ASU on the Company's Consolidated Financial Statements and Notes to the Consolidated Financial Statements. |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

| Standard |  | Description | Effective date <br> and method of <br> adoption |
| :--- | :--- | :--- | :--- |

## 3. ACQUISITIONS

## Acquisition of Deutsche Bank's India Asset Management Business

In August 2015, the Company and its asset management joint venture partner in India agreed to acquire Deutsche Bank's India asset management business through the joint venture. In March 2016, the Company and its asset management joint venture partner in India completed the acquisition. This acquisition, which will expand the Company's investment management expertise, distribution platform and product portfolio in India, did not have a material impact on the Company's financial results.

## Acquisition of Administradora de Fondos de Pensiones Habitat S.A.

In March 2016, the Company completed the purchase of an indirect $40 \%$ ownership interest in Administradora de Fondos de Pensiones Habitat S.A. ("AFP Habitat"), a leading provider of retirement services in Chile, from Inversiones La Construcción S.A. ("ILC"), the investment subsidiary of the Chilean Construction Chamber. The Company paid 899.90 Chilean pesos per share, for a total purchase price of approximately $\$ 532$ million based on exchange rates at the share acquisition date. The Company and ILC now equally own an indirect controlling stake in AFP Habitat through a joint holding company. The Company's investment will be accounted for under the equity method and is recorded within "Other assets." This acquisition will enable the Company to participate in the growing Chilean pension market.

## Acquisition of UniAsia Life Assurance

In January 2014, the Company completed the acquisition of UniAsia Life Assurance Berhad, an established life insurance company in Malaysia, through the formation of a joint venture with Bank Simpanan Nasional ("BSN"), a bank owned by the Malaysian government. The joint venture paid cash consideration of $\$ 158$ million, $70 \%$ of which was provided by Prudential Insurance and $30 \%$ of which was provided by BSN. This acquisition is part of the Company's strategic initiative to further expand its business in Southeast Asian markets. Subsequent to the acquisition, the Company renamed the acquired company Gibraltar BSN Life Berhad.

The assets acquired and the liabilities assumed have been included in the Company's Consolidated Financial Statements as of the acquisition date. After adjustments, total assets acquired were $\$ 758$ million, including $\$ 88$ million of cash and cash equivalents and $\$ 33$ million of goodwill, none of which is deductible for local tax purposes, and the total liabilities assumed were $\$ 600$ million.

Prudential Financial made a Section 338(g) election under the Internal Revenue Code with respect to this acquisition, resulting in the acquired entity being treated for U.S. tax purposes as a newly-incorporated company. Under such election, the U.S. tax basis of the assets acquired and liabilities assumed of UniAsia Life Assurance Berhad was adjusted as of January 2, 2014, to reflect the consequences of the Section 338(g) election.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 4. INVESTMENTS

## Fixed Maturities and Equity Securities

The following tables provide information relating to fixed maturities and equity securities (excluding investments classified as trading) as of the dates indicated:

|  | December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { Cost }}{\text { Amortized }}$ | $\qquad$ Unrealized Gains | Gross <br> Unrealized <br> Losses <br> (in millions) | Fair <br> Value | $\begin{gathered} \text { OTTI } \\ \text { in AOCI(4) } \end{gathered}$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 21,505 | \$ 3,280 | \$1,001 | \$ 23,784 | \$ 0 |
| Obligations of U.S. states and their political subdivisions . . . . . . . . | 9,060 | 716 | 84 | 9,692 | 0 |
| Foreign government bonds . | 79,862 | 16,748 | 354 | 96,256 | 0 |
| U.S. corporate public securities | 76,383 | 6,460 | 1,232 | 81,611 | (17) |
| U.S. corporate private securities(1) | 29,974 | 2,122 | 308 | 31,788 | (22) |
| Foreign corporate public securities | 25,758 | 2,784 | 305 | 28,237 | (6) |
| Foreign corporate private securities | 21,383 | 646 | 1,149 | 20,880 | 0 |
| Asset-backed securities(2) | 11,759 | 229 | 53 | 11,935 | (288) |
| Commercial mortgage-backed securities | 12,589 | 240 | 125 | 12,704 | (1) |
| Residential mortgage-backed securities(3) | 4,308 | 238 | 14 | 4,532 | (3) |
| Total fixed maturities, available-for-sale(1) | \$292,581 | \$33,463 | \$4,625 | \$321,419 | \$(337) |
| Equity securities, available-for-sale | \$ 7,149 | \$ 2,641 | \$ 42 | \$ 9,748 |  |
|  |  | December 31, 2016 |  |  |  |
|  |  | $\begin{gathered} \text { Amortized } \\ \text { Cost } \\ \hline \end{gathered}$ | dGross <br> Unrealized <br> Gains | Gross <br> Unrealized <br> Losses | $\begin{gathered} \text { Fair } \\ \text { Value } \end{gathered}$ |
|  |  |  | (in mi | ilions) |  |
| Fixed maturities, held-to-maturity |  |  |  |  |  |
| Foreign government bonds . |  | \$ 839 | \$262 | \$0 | \$1,101 |
| Foreign corporate public securities |  | 651 | 71 | 0 | 722 |
| Foreign corporate private securities(5) . |  | 81 | 4 | 0 | 85 |
| Commercial mortgage-backed securities |  | 0 | 0 | 0 | 0 |
| Residential mortgage-backed securities(3) |  | 573 | 43 | 0 | 616 |
| Total fixed maturities, held-to-maturity(5) |  | \$2,144 | $\stackrel{\$ 80}{ }$ | \$0 | $\underline{\$ 2,524}$ |

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## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Gross Unrealized Gains | Gross Unrealized | Fair Value | $\begin{gathered} \text { OTTI } \\ \text { in AOCI(4) } \\ \hline \end{gathered}$ |
|  |  |  | (in millions) |  |  |
| Fixed maturities, available-for-sale |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 14,992 | \$ 3,544 | \$ 19 | \$ 18,517 |  |
| Obligations of U.S. states and their political subdivisions | 8,089 | 747 | 41 | 8,795 | 0 |
| Foreign government bonds. | 71,849 | 12,011 | 147 | 83,713 | 1 |
| U.S. corporate public securities | 70,979 | 6,344 | 1,955 | 75,368 | (3) |
| U.S. corporate private securities(1) | 28,525 | 2,278 | 359 | 30,444 | 0 |
| Foreign corporate public securities | 26,354 | 2,821 | 621 | 28,554 | 0 |
| Foreign corporate private securities | 19,393 | 739 | 994 | 19,138 | 0 |
| Asset-backed securities(2) | 10,121 | 226 | 121 | 10,226 | (452) |
| Commercial mortgage-backed securities | 10,337 | 195 | 70 | 10,462 | (1) |
| Residential mortgage-backed securities(3) | 4,777 | 335 | 6 | 5,106 | (4) |
| Total fixed maturities, available-for-sale(1) | \$265,416 | \$29,240 | \$4,333 | \$290,323 | \$(459) |
| Equity securities, available-for-sale | \$ 6,847 | \$ 2,570 | \$ 143 | \$ 9,274 |  |


|  | December 31, 2015 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | $\begin{gathered} \hline \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ | $\begin{gathered} \hline \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | $\begin{aligned} & \text { Fair } \\ & \text { Value } \end{aligned}$ |
|  | (in millions) |  |  |  |
| Fixed maturities, held-to-maturity |  |  |  |  |
| Foreign government bonds | \$ 816 | \$196 | \$0 | \$1,012 |
| Foreign corporate public securities | 625 | 62 | 0 | 687 |
| Foreign corporate private securities(5) | 78 | 4 | 0 | 82 |
| Commercial mortgage-backed securities | 33 | 1 | 0 | 34 |
| Residential mortgage-backed securities(3) | 756 | 53 | 0 | 809 |
| Total fixed maturities, held-to-maturity(5) | \$2,308 | \$316 | \$0 | \$2,624 |

(1) Excludes notes with amortized cost of $\$ 1,050$ million (fair value, $\$ 1,039$ million), which have been offset with the associated payables under a netting agreement.
(2) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.
(3) Includes publicly-traded agency pass-through securities and collateralized mortgage obligations.
(4) Represents the amount of OTTI losses in AOCI, which were not included in earnings. Amount excludes $\$ 693$ million of net unrealized gains on impaired available-for-sale securities and less than $\$ 1$ million of net unrealized gains on impaired held-to-maturity securities relating to changes in the value of such securities subsequent to the impairment measurement date.
(5) Excludes notes with amortized cost of $\$ 3,850$ million (fair value, $\$ 4,081$ million), which have been offset with the associated payables under a netting agreement.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The following tables show the fair value and gross unrealized losses aggregated by investment category and length of time that individual fixed maturity securities and equity securities have been in a continuous unrealized loss position, at December 31 for the years indicated:

|  | 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than twelve months |  | Twelve months or more |  | Total |  |
|  | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses |
|  | (in millions) |  |  |  |  |  |
| Fixed maturities(1) |  |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 9,345 | \$1,001 | \$ 0 | \$ 0 | \$ 9,345 | \$1,001 |
| Obligations of U.S. states and their political subdivisions | 2,677 | 79 | 19 | 5 | 2,696 | 84 |
| Foreign government bonds | 6,076 | 325 | 310 | 29 | 6,386 | 354 |
| U.S. corporate public securities | 22,803 | 905 | 2,943 | 327 | 25,746 | 1,232 |
| U.S. corporate private securities | 7,797 | 228 | 1,296 | 80 | 9,093 | 308 |
| Foreign corporate public securities | 5,196 | 162 | 1,047 | 143 | 6,243 | 305 |
| Foreign corporate private securities | 6,557 | 350 | 4,916 | 799 | 11,473 | 1,149 |
| Asset-backed securities | 2,357 | 20 | 1,581 | 33 | 3,938 | 53 |
| Commercial mortgage-backed securities | 4,879 | 123 | 60 | 2 | 4,939 | 125 |
| Residential mortgage-backed securities | 926 | 12 | 78 | 2 | 1,004 | 14 |
| Total | \$68,613 | \$3,205 | \$12,250 | \$1,420 | \$80,863 | \$4,625 |
| Equity securities, available-for-sale | \$ 637 | \$ 41 | \$ 12 | \$ 1 | \$ 649 | \$ 42 |

(1) Includes $\$ 12$ million of fair value and less than $\$ 1$ million of gross unrealized losses at December 31, 2016, on securities classified as held-to-maturity, which is not reflected in AOCI.

|  | 2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than twelve months |  | Twelve months or more |  | Total |  |
|  | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses |
|  | (in millions) |  |  |  |  |  |
| Fixed maturities |  |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 3,068 | \$ 19 | \$ 0 | \$ 0 | \$ 3,068 | \$ 19 |
| Obligations of U.S. states and their political subdivisions | 1,391 | 40 | 7 | 1 | 1,398 | 41 |
| Foreign government bonds | 1,925 | 82 | 411 | 65 | 2,336 | 147 |
| U.S. corporate public securities | 24,642 | 1,396 | 3,455 | 559 | 28,097 | 1,955 |
| U.S. corporate private securities | 6,996 | 266 | 802 | 93 | 7,798 | 359 |
| Foreign corporate public securities | 5,985 | 288 | 1,584 | 333 | 7,569 | 621 |
| Foreign corporate private securities | 6,199 | 340 | 3,917 | 654 | 10,116 | 994 |
| Asset-backed securities | 4,342 | 33 | 3,138 | 88 | 7,480 | 121 |
| Commercial mortgage-backed securities | 3,888 | 63 | 473 | 7 | 4,361 | 70 |
| Residential mortgage-backed securities | 558 | 4 | 119 | 2 | 677 | 6 |
| Total | \$58,994 | \$2,531 | \$13,906 | \$1,802 | \$72,900 | \$4,333 |
| Equity securities, available-for-sale | \$ 1,862 | \$ 142 | \$ 11 | \$ 1 | \$ 1,873 | \$ 143 |

The gross unrealized losses on fixed maturity securities at December 31, 2016 and 2015, were composed of $\$ 4,233$ million and $\$ 3,750$ million, respectively, related to high or highest quality securities based on the National Association of Insurance Commissioners ("NAIC") or equivalent rating and $\$ 392$ million and $\$ 583$ million, respectively, related to other than high or highest quality securities based on NAIC or equivalent rating. At December 31, 2016, the $\$ 1,420$ million of gross unrealized losses of twelve months or more were concentrated in the energy, utility and capital goods sectors of the Company's corporate securities. At December 31, 2015, the $\$ 1,802$ million of gross unrealized losses of twelve months or more were concentrated in the energy, consumer non-cyclical and basic industry sectors of the Company's corporate securities. In accordance with its policy described in Note 2, the Company concluded that an adjustment to earnings for OTTI for these securities was not warranted at either December 31, 2016 or 2015. These conclusions are based on a detailed analysis of the underlying credit and cash flows on each security. The gross unrealized losses are primarily attributable to general credit spread widening and foreign currency exchange rate movements. At December 31, 2016, the Company does not intend to sell these securities, and it is not more likely than not that the Company will be required to sell these securities before the anticipated recovery of the remaining amortized cost basis.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

At December 31, 2016, $\$ 9$ million of the gross unrealized losses on equity securities represented declines in value of greater than $20 \%$, $\$ 8$ million of which had been in that position for less than six months. At December 31, 2015, $\$ 19$ million of the gross unrealized losses on equity securities represented declines in value of greater than $20 \%$, all of which had been in that position for less than six months. In accordance with its policy described in Note 2, the Company concluded that an adjustment for OTTI for these equity securities was not warranted at either December 31, 2016 or 2015.

The amortized cost and fair value of fixed maturities by contractual maturities at December 31, 2016, are as follows:

|  | Available-for-Sale |  | Held-to-Maturity |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Due in one year or less | \$ 9,264 | \$ 9,827 | \$ 11 | \$ 11 |
| Due after one year through five years | 44,669 | 48,592 | 172 | 181 |
| Due after five years through ten years | 61,561 | 65,832 | 552 | 618 |
| Due after ten years(1) | 148,431 | 167,997 | 836 | 1,098 |
| Asset-backed securities | 11,759 | 11,935 | 0 | 0 |
| Commercial mortgage-backed securities | 12,589 | 12,704 | 0 | 0 |
| Residential mortgage-backed securities | 4,308 | 4,532 | 573 | 616 |
| Total | \$292,581 | \$321,419 | \$2,144 | \$2,524 |

(1) Excludes available-for-sale notes with amortized cost of $\$ 1,456$ million (fair value, $\$ 1,456$ million) and held-to-maturity notes with amortized cost of $\$ 4,403$ million (fair value, $\$ 4,403$ million), which have been offset with the associated payables under a netting agreement.

Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations. Assetbacked, commercial mortgage-backed and residential mortgage-backed securities are shown separately in the table above, as they are not due at a single maturity date.

The following table depicts the sources of fixed maturity and equity security proceeds and related investment gains (losses), as well as losses on impairments of both fixed maturities and equity securities:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Fixed maturities, available-for-sale |  |  |  |
| Proceeds from sales(1) | \$29,878 | \$27,679 | \$28,359 |
| Proceeds from maturities/repayments | 19,710 | 19,559 | 21,040 |
| Gross investment gains from sales, prepayments and maturities | 1,433 | 2,115 | 1,664 |
| Gross investment losses from sales and maturities | (545) | (340) | (414) |
| Fixed maturities, held-to-maturity |  |  |  |
| Gross investment gains from prepayments | \$ 0 | \$ 0 | \$ |
| Proceeds from maturities/repayments(2) | 272 | 235 | 415 |
| Equity securities, available-for-sale |  |  |  |
| Proceeds from sales(3) | \$ 3,504 | \$ 4,589 | \$ 4,993 |
| Gross investment gains from sales | 608 | 746 | 676 |
| Gross investment losses from sales | (158) | (169) | (132) |
| Fixed maturity and equity security impairments |  |  |  |
| Net writedowns for other-than-temporary impairment losses on fixed maturities recognized in earnings(4) | \$ (222) | \$ (141) | \$ (56) |
| Writedowns for impairments on equity securities | (74) | (126) | (32) |

(1) Includes $\$(125)$ million, $\$ 158$ million and $\$(130)$ million of non-cash related proceeds for the years ended December 31, 2016, 2015 and 2014, respectively.
(2) Includes $\$ 1$ million, less than $\$ 1$ million and less than $\$ 1$ million of non-cash related proceeds for the years ended December 31, 2016, 2015 and 2014, respectively.
(3) Includes $\$ 2$ million, $\$ 12$ million and $\$(8)$ million of non-cash related proceeds for the years ended December 31, 2016, 2015 and 2014, respectively.
(4) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)" ("OCI"), representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.

As discussed in Note 2, a portion of certain OTTI losses on fixed maturity securities is recognized in OCI. For these securities, the net amount recognized in earnings ("credit loss impairments") represents the difference between the amortized cost of the security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the debt security prior to impairment. Any remaining difference between the fair value and amortized cost is recognized in OCI. The following table sets forth the amount of pre-tax

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

credit loss impairments on fixed maturity securities held by the Company as of the dates indicated, for which a portion of the OTTI loss was recognized in OCI, and the corresponding changes in such amounts:

|  | Year End | ember 31 |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  |  |  |
| Balance, beginning of period | \$ 532 | \$ 781 |
| Credit loss impairments previously recognized on securities which matured, paid down, prepaid or were sold during the period | (229) | (243) |
| Credit loss impairments previously recognized on securities impaired to fair value during the period(1) | (2) | (20) |
| Credit loss impairments recognized in the current period on securities not previously impaired | 41 | 3 |
| Additional credit loss impairments recognized in the current period on securities previously impaired | 1 | 3 |
| Increases due to the passage of time on previously recorded credit losses | 24 | 20 |
| Accretion of credit loss impairments previously recognized due to an increase in cash flows expected to be collected | (8) | (12) |
| Balance, end of period | \$ 359 | \$ 532 |

(1) Represents circumstances where the Company determined in the current period that it intends to sell the security or it is more likely than not that it will be required to sell the security before recovery of the security's amortized cost.

## Trading Account Assets Supporting Insurance Liabilities

The following table sets forth the composition of "Trading account assets supporting insurance liabilities" as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Short-term investments and cash equivalents | \$ 655 | \$ 655 | \$ 765 | \$ 765 |
| Fixed maturities: |  |  |  |  |
| Corporate securities | 13,903 | 13,997 | 12,797 | 12,851 |
| Commercial mortgage-backed securities | 2,032 | 2,052 | 1,860 | 1,862 |
| Residential mortgage-backed securities(1) | 1,142 | 1,150 | 1,411 | 1,428 |
| Asset-backed securities(2) | 1,333 | 1,349 | 1,295 | 1,299 |
| Foreign government bonds | 915 | 926 | 680 | 694 |
| U.S. government authorities and agencies and obligations of U.S. states | 330 | 376 | 326 | 369 |
| Total fixed maturities | 19,655 | 19,850 | 18,369 | 18,503 |
| Equity securities | 1,097 | 1,335 | 1,030 | 1,254 |
| Total trading account assets supporting insurance liabilities | \$21,407 | \$21,840 | \$20,164 | \$20,522 |

(1) Includes publicly-traded agency pass-through securities and collateralized mortgage obligations.
(2) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.

The net change in unrealized gains (losses) from trading account assets supporting insurance liabilities still held at period end, recorded within "Other income," was $\$ 75$ million, $\$(642)$ million and $\$ 144$ million during the years ended December 31, 2016, 2015 and 2014, respectively.

## Other Trading Account Assets

The following table sets forth the composition of the "Other trading account assets" as of the dates indicated:

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Short-term investments and cash equivalents . | \$ 26 | \$ 26 | \$ 26 | \$ 26 |
| Fixed maturities | 3,634 | 3,453 | 11,132 | 10,764 |
| Equity securities | 985 | 1,056 | 1,006 | 1,098 |
| Other | 4 | 5 | 12 | 15 |
| Subtotal | \$4,649 | 4,540 | \$12,176 | 11,903 |
| Derivative instruments |  | 1,224 |  | 2,555 |
| Total other trading account assets |  | \$5,764 |  | \$14,458 |

The net change in unrealized gains (losses) from other trading account assets, excluding derivative instruments, still held at period end, recorded within "Other income," was $\$ 164$ million, $\$(366)$ million and $\$(108)$ million during the years ended December 31, 2016, 2015 and 2014, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Concentrations of Financial Instruments

The Company monitors its concentrations of financial instruments and mitigates credit risk by maintaining a diversified investment portfolio which limits exposure to any one issuer.

As of both December 31, 2016 and 2015, the Company's exposure to concentrations of credit risk of single issuers greater than $10 \%$ of the Company's stockholders' equity included securities of the U.S. government, certain U.S. government agencies and certain securities guaranteed by the U.S. government, as well as the securities disclosed below.

|  | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Investments in Japanese government and government agency securities: |  |  |  |  |
| Fixed maturities, available-for-sale | \$60,240 | \$73,051 | \$53,851 | \$61,911 |
| Fixed maturities, held-to-maturity | 818 | 1,075 | 796 | 988 |
| Trading account assets supporting insurance liabilities | 537 | 550 | 492 | 502 |
| Other trading account assets | 16 | 16 | 33 | 33 |
| Total | \$61,611 | \$74,692 | \$55,172 | \$63,434 |
|  | December 31, 2016 |  | December 31, 2015 |  |
|  | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
|  | (in millions) |  |  |  |
| Investments in South Korean government and government agency securities: |  |  |  |  |
| Fixed maturities, available-for-sale | \$ 7,581 | \$ 9,435 | \$ 7,191 | \$ 9,233 |
| Fixed maturities, held-to-maturity | 0 | 0 | 0 | 0 |
| Trading account assets supporting insurance liabilities | 44 | 44 | 44 | 44 |
| Other trading account assets | 0 | 0 | 0 | 0 |
| Total | \$ 7,625 | \$ 9,479 | \$ 7,235 | \$ 9,277 |

## Commercial Mortgage and Other Loans

The Company's commercial mortgage and other loans are comprised as follows, as of the dates indicated:

| Commercial mortgage and agricultural property loans by property type: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| Retail | 8,555 | 16.5 | 8,917 | 18.2 |
| Apartments/Multi-Family | 13,733 | 26.4 | 12,034 | 24.5 |
| Industrial | 8,075 | 15.5 | 7,775 | 15.9 |
| Hospitality | 2,274 | 4.4 | 2,513 | 5.1 |
| Other | 3,966 | 7.6 | 3,722 | 7.6 |
| Total commercial mortgage loans | 49,027 | 94.3 | 46,187 | 94.2 |
| Agricultural property loans | 2,958 | 5.7 | 2,859 | 5.8 |
| Total commercial mortgage and agricultural property loans by property type | 51,985 | 100.0\% | 49,046 | 100.0\% |
| Valuation allowance | (98) |  | (99) |  |
| Total net commercial mortgage and agricultural property loans by property type | 51,887 |  | 48,947 |  |
| Other loans: |  |  |  |  |
| Uncollateralized loans | 638 |  | 1,012 |  |
| Residential property loans | 252 |  | 301 |  |
| Other collateralized loans | 10 |  | 312 |  |
| Total other loans | 900 |  | 1,625 |  |
| Valuation allowance | (8) |  | (13) |  |
| Total net other loans | 892 |  | 1,612 |  |
| Total commercial mortgage and other loans(1) | \$52,779 |  | \$50,559 |  |

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## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The commercial mortgage and agricultural property loans are geographically dispersed throughout the United States (with the largest concentrations in California (27\%), New York (9\%) and Texas (9\%)) and include loans secured by properties in Europe (4\%) and Asia (1\%) at December 31, 2016.

Activity in the allowance for credit losses for all commercial mortgage and other loans, as of the dates indicated, is as follows:

|  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial Mortgage Loans | Agricultural Property Loans | Residential Property Loans | Other Collateralized Loans | Uncollateralized Loans | Total |
|  | (in millions) |  |  |  |  |  |
| Allowance for credit losses, beginning of year | \$97 | \$2 | \$ 3 | \$0 | \$10 | \$112 |
| Addition to (release of) allowance for losses | 0 | 0 | (1) | 0 | (5) | (6) |
| Charge-offs, net of recoveries | (1) | 0 | 0 | 0 | 0 | (1) |
| Change in foreign exchange | 0 | 0 | 0 | 0 | 1 | 1 |
| Total ending balance | \$96 | \$2 | \$2 | \$0 | \$ 6 | \$106 |
|  | December 31, 2015 |  |  |  |  |  |
|  | Commercial Mortgage Loans | Agricultural Property Loans | $\begin{gathered} \text { Residential } \\ \text { Property } \\ \text { Loans } \end{gathered}$ | Other Collateralized Loans | Uncollateralized Loans | Total |
|  | (in millions) |  |  |  |  |  |
| Allowance for credit losses, beginning of year | \$104 | \$1 | \$ 5 | \$0 | \$ 9 | \$119 |
| Addition to (release of) allowance for losses | (7) | 1 | (2) | 0 | 1 | (7) |
| Charge-offs, net of recoveries | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in foreign exchange | 0 | 0 | 0 | 0 | 0 | 0 |
| Total ending balance | \$ 97 | \$2 | \$ 3 | \$0 | \$10 | \$112 |

The following tables set forth the allowance for credit losses and the recorded investment in commercial mortgage and other loans as of the dates indicated:

|  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial Mortgage Loans | $\begin{gathered} \text { Agricultural } \\ \text { Property } \\ \text { Loans } \end{gathered}$ | Residential Property Loans | Other Collateralized Loans | Uncollateralized Loans | Total |
|  | (in millions) |  |  |  |  |  |
| Allowance for Credit Losses: |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 6 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 6 |
| Collectively evaluated for impairment | 90 | 2 | 2 | 0 | 6 | 100 |
| Loans acquired with deteriorated credit quality | 0 | 0 | 0 | 0 | 0 | 0 |
| Total ending balance | \$ 96 | \$ 2 | \$ 2 | \$ 0 | \$ 6 | \$ 106 |
| Recorded Investment(1): |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 116 | \$ 30 | \$ 0 | \$ 0 | \$ 2 | \$ 148 |
| Collectively evaluated for impairment | 48,911 | 2,928 | 252 | 10 | 636 | 52,737 |
| Loans acquired with deteriorated credit quality | 0 | 0 | 0 | 0 | 0 | 0 |
| Total ending balance | \$49,027 | \$2,958 | \$252 | \$10 | \$638 | \$52,885 |

[^9]
## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | December 31, 2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial Mortgage Loans Loans | Agricultural Property Loans | Residential Property Loans | Other Collateralized Loans | Uncollateralized Loans | Total |
|  | (in millions) |  |  |  |  |  |
| Allowance for Credit Losses: |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 1 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 1 |
| Collectively evaluated for impairment | 96 | 2 | 3 | 0 | 10 | 111 |
| Loans acquired with deteriorated credit quality | 0 | 0 | 0 | 0 | 0 | 0 |
| Total ending balance | \$ 97 | \$ 2 | \$ 3 | \$ 0 | \$ 10 | \$ 112 |
| Recorded Investment(1): |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 111 | \$ 8 | \$ 0 | \$ 0 | \$ 2 | \$ 121 |
| Collectively evaluated for impairment | 46,076 | 2,851 | 301 | 312 | 1,010 | 50,550 |
| Loans acquired with deteriorated credit quality | 0 | 0 | 0 | 0 | 0 | 0 |
| Total ending balance | \$46,187 | \$2,859 | \$301 | \$312 | \$1,012 | \$50,671 |

(1) Recorded investment reflects the carrying value gross of related allowance.

The net carrying value of commercial mortgage and other loans held for sale by the Company as of December 31, 2016 and 2015, was $\$ 519$ million and $\$ 274$ million, respectively. For all of these loans, the Company pre-arranges that it will sell the loan to an investor. As of both December 31, 2016 and 2015, all of the Company's commercial mortgage and other loans held for sale were collateralized, with collateral primarily consisting of apartment complexes.

The following tables set forth certain key credit quality indicators based upon the recorded investment gross of allowance for credit losses as of the date indicated:

## Commercial mortgage loans



## Agricultural property loans

|  | Debt Service Coverage Ratio-December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\geq 1.2 \mathrm{X}$ | 1.0X to $<1.2 \mathrm{X}$ | $\begin{aligned} & \text { Less than } \\ & 1.0 X \end{aligned}$ | Total |
|  | (in millions) |  |  |  |
| Loan-to-Value Ratio |  |  |  |  |
| 0\%-59.99\% | \$2,803 | \$114 | \$17 | \$2,934 |
| 60\%-69.99\% | 24 | 0 | 0 | 24 |
| 70\%-79.99\% | 0 | 0 | 0 | 0 |
| $80 \%$ or greater | 0 | 0 | 0 | 0 |
| Total agricultural property loans. | \$2,827 | \$114 | \$17 | \$2,958 |

## Total commercial mortgage and agricultural property loans



## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The following tables set forth certain key credit quality indicators based upon the recorded investment gross of allowance for credit losses as of the date indicated:

## Commercial mortgage loans

|  | Debt Service Coverage Ratio-December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\geq 1.2 \mathrm{X}$ | 1.0X to $<1.2$ |  | $\begin{gathered} \text { Less than } \\ 1.0 \mathrm{X} \end{gathered}$ | Total |
|  | (in millions) |  |  |  |  |
| Loan-to-Value Ratio |  |  |  |  |  |
| 0\%-59.99\% | \$25,978 |  | \$ 515 | \$207 | \$26,700 |
| 60\%-69.99\% | 12,191 |  | 395 | 234 | 12,820 |
| 70\%-79.99\% | 5,668 |  | 500 | 97 | 6,265 |
| $80 \%$ or greater | 119 |  | 151 | 132 | 402 |
| Total commercial mortgage loans | \$43,956 |  | \$1,561 | \$670 | \$46,187 |

## Agricultural property loans

|  | Debt Service Coverage Ratio-December 31, 2015 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\geq 1.2 \mathrm{X}$ | 1.0X to $<1.2 \mathrm{X}$ | Less than 1.0X | Total |
|  | (in millions) |  |  |  |
| Loan-to-Value Ratio |  |  |  |  |
| 0\%-59.99\% | \$2,587 | \$84 | \$3 | \$2,674 |
| 60\%-69.99\% | 185 | 0 | 0 | 185 |
| 70\%-79.99\% | 0 | 0 | 0 | 0 |
| $80 \%$ or greater | 0 | 0 | 0 | 0 |
| Total agricultural property loans | \$2,772 | \$84 | \$3 | \$2,859 |

## Total commercial mortgage and agricultural property loans



The following tables provide an aging of past due commercial mortgage and other loans as of the dates indicated, based upon the recorded investment gross of allowance for credit losses, as well as the amount of commercial mortgage and other loans on non-accrual status as of the dates indicated:

|  | December 31, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current | 30-59 Days | 60-89 Days Past Due | 90 Days or More Past Due(1) | Total Past Due | Total Loans | NonAccrual Status |
|  | (in millions) |  |  |  |  |  |  |
| Commercial mortgage loans | \$49,006 | \$21 | \$0 | \$0 | \$21 | \$49,027 | \$49 |
| Agricultural property loans | 2,956 | 0 | 0 | 2 | 2 | 2,958 | 2 |
| Residential property loans | 241 | 7 | 1 | 3 | 11 | 252 | 3 |
| Other collateralized loans | 10 | 0 | 0 | 0 | 0 | 10 | 0 |
| Uncollateralized loans | 638 | 0 | 0 | 0 | 0 | 638 | 0 |
| Total | \$52,851 | \$28 | \$1 | \$5 | \$34 | \$52,885 | \$54 |

(1) There were no loans accruing interest.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | December 31, 2015 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current | 30-59 Days Past Due | 60-89 Days Past Due | 90 Days or More Past Due(1) | Total Past Due | Total Loans | NonAccrual Status |
|  | (in millions) |  |  |  |  |  |  |
| Commercial mortgage loans | \$46,187 | \$0 | \$0 | \$0 | \$ 0 | \$46,187 | \$53 |
| Agricultural property loans | 2,856 | 2 | 0 | 1 | 3 | 2,859 | 1 |
| Residential property loans | 288 | 7 | 0 | 6 | 13 | 301 | 6 |
| Other collateralized loans | 312 | 0 | 0 | 0 | 0 | 312 | 0 |
| Uncollateralized loans | 1,012 | 0 | 0 | 0 | 0 | 1,012 | 0 |
| Total | \$50,655 | \$9 | \$0 | \$7 | \$16 | \$50,671 | \$60 |

(1) There were no loans accruing interest.

See Note 2 for further discussion regarding non-accrual status loans.

For the years ended December 31, 2016 and 2015, there were $\$ 0$ million and $\$ 214$ million, respectively, of commercial mortgage and other loans acquired, other than those through direct origination. For the years ended December 31, 2016 and 2015 , there were $\$ 0$ million and $\$ 18$ million of commercial mortgage and other loans sold, other than those classified as held-for-sale.

The Company's commercial mortgage and other loans may occasionally be involved in a troubled debt restructuring. As of both December 31, 2016 and 2015, the Company had no significant commitments to borrowers that have been involved in a troubled debt restructuring. As of December 31, 2016 and 2015, there were $\$ 47$ million and $\$ 0$ million of new troubled debt restructurings related to commercial mortgage loans with payment defaults that were modified as a troubled debt restructuring within the twelve months preceding. See Note 2 for additional information relating to the accounting for troubled debt restructurings.

As of December 31, 2016, there were no private debt commitments to borrowers that have been involved in a troubled debt restructuring.

## Other Long-Term Investments

The following table sets forth the composition of "Other long-term investments" at December 31 for the years indicated:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Joint ventures and limited partnerships: |  |  |
| Private equity | \$ 4,059 | \$4,393 |
| Hedge funds | 2,660 | 2,054 |
| Real estate-related | 1,291 | 1,085 |
| Total joint ventures and limited partnerships | 8,010 | 7,532 |
| Real estate held through direct ownership | 2,195 | 1,464 |
| Other | 1,078 | 990 |
| Total other long-term investments | \$11,283 | \$9,986 |

In certain investment structures, the Company's asset management business invests with other co-investors in an investment fund referred to as a feeder fund. In these structures, the invested capital of several feeder funds is pooled together and used to purchase ownership interests in another fund, referred to as a master fund. The master fund utilizes this invested capital and, in certain cases, other debt financing, to purchase various classes of assets on behalf of its investors. Specialized industry accounting for investment companies calls for the feeder fund to reflect its investment in the master fund as a single net asset equal to its proportionate share of the net assets of the master fund, regardless of its level of interest in the master fund. In cases where the Company consolidates the feeder fund, it retains the feeder fund's net asset presentation and reports the consolidated feeder fund's proportionate share of the net assets of the master fund in "Other long-term investments," with any unaffiliated investors' non-controlling interest in the feeder fund reported in "Other liabilities" or "Noncontrolling interests." The consolidated feeder funds' investments in these master funds, reflected on this net asset basis, totaled $\$ 216$ million and $\$ 81$ million as of December 31, 2016 and 2015 , respectively. There was $\$ 93$ million and $\$ 0$ million of unaffiliated interest in the consolidated feeder funds as of December 31, 2016 and 2015, respectively, and the master funds had gross assets of $\$ 36,279$ million and $\$ 17,508$ million, respectively, and gross liabilities of $\$ 34,880$ million and $\$ 16,920$ million, respectively, which are not included on the Company's balance sheet.

## Equity Method Investments

The following tables set forth summarized combined financial information for significant joint ventures and limited partnership interests accounted for under the equity method, including the Company's investments in operating joint ventures

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

that are described in more detail in Note 7. Changes between periods in the tables below reflect changes in the activities within the joint ventures and limited partnerships, as well as changes in the Company's level of investment in such entities.

|  | At December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| STATEMENTS OF FINANCIAL POSITION |  |  |
| Total assets(1) | \$59,897 | \$53,799 |
| Total liabilities(2) | \$14,787 | \$13,610 |
| Partners' capital | 45,110 | 40,189 |
| Total liabilities and partners' capital | \$59,897 | \$53,799 |
| Total liabilities and partners' capital included above | \$ 5,135 | \$ 4,398 |
| Equity in limited partnership interests not included above | 592 | 142 |
| Carrying value | \$ 5,727 | \$ 4,540 |

(1) Assets consist primarily of investments in real estate, investments in securities and other miscellaneous assets.
(2) Liabilities consist primarily of third-party-borrowed funds, securities repurchase agreements and other miscellaneous liabilities.


## STATEMENTS OF OPERATIONS

| Total revenue(1) | \$ 5,360 | \$ 4,356 | \$ 5,632 |
| :---: | :---: | :---: | :---: |
| Total expenses(2) | $(1,995)$ | $(1,803)$ | $(1,654)$ |
| Net earnings (losses) | \$ 3,365 | \$ 2,553 | \$ 3,978 |
| Equity in net earnings (losses) included above | \$ 247 | \$ 216 | \$ 522 |
| Equity in net earnings (losses) of limited partnership interests not included above | 103 | 32 | 72 |
| Total equity in net earnings (losses) | \$ 350 | \$ 248 | \$ 594 |

(1) Revenue consists of income from investments in real estate, investments in securities and other income.
(2) Expenses consist primarily of interest expense, management fees, salary expenses and other expenses.

## Net Investment Income

The following table sets forth net investment income by asset class for the years ended December 31:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | in millions) |  |
| Fixed maturities, available-for-sale(1)(2) | \$10,920 | \$10,347 | \$10,558 |
| Fixed maturities, held-to-maturity(1)(2) | 208 | 202 | 185 |
| Equity securities, available-for-sale | 366 | 337 | 354 |
| Trading account assets | 986 | 1,205 | 1,074 |
| Commercial mortgage and other loans | 2,243 | 2,255 | 2,103 |
| Policy loans | 627 | 619 | 632 |
| Short-term investments and cash equivalents | 145 | 56 | 38 |
| Other long-term investments | 731 | 717 | 1,050 |
| Gross investment income | 16,226 | 15,738 | 15,994 |
| Less: investment expenses | (706) | (909) | (738) |
| Net investment income | \$15,520 | \$14,829 | \$15,256 |

(1) Includes income on credit-linked notes which are reported on the same financial statement line item as related surplus notes, as conditions are met for right to offset.
(2) During 2016, fixed maturity prepayment fees and call premiums were reclassified to "Net investment income." Prior periods were not restated. The impact of this change was immaterial.

The carrying value of non-income producing assets included $\$ 379$ million in fixed maturities, $\$ 23$ million in trading account assets supporting insurance liabilities, less than $\$ 1$ million in other trading account assets and less than $\$ 1$ million in commercial mortgage and other loans as of December 31, 2016. Non-income producing assets represent investments that have not produced income for the twelve months preceding December 31, 2016.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Realized Investment Gains (Losses), Net

Realized investment gains (losses), net, for the years ended December 31, were from the following sources:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | n millions |  |
| Fixed maturities | \$ 666 | \$1,634 | \$1,194 |
| Equity securities | 376 | 451 | 512 |
| Commercial mortgage and other loans | 55 | 37 | 110 |
| Investment real estate | 15 | 40 | (5) |
| Joint ventures and limited partnerships | (94) | (122) | (15) |
| Derivatives(1) | 1,175 | 1,970 | (182) |
| Other | 1 | 15 | 22 |
| Realized investment gains (losses) | \$2,194 | \$4,025 | \$1,636 |

(1) Includes the offset of hedged items in qualifying effective hedge relationships prior to maturity or termination.

## Net Unrealized Gains (Losses) on Investments by Asset Class

The table below presents net unrealized gains (losses) on investments by asset class at December 31 for the years indicated:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | (n millions) |  |
| Fixed maturity securities on which an OTTI loss has been recognized | \$ 312 | \$ 234 | \$ 349 |
| Fixed maturity securities, available-for-sale-all other | 28,526 | 24,673 | 33,625 |
| Equity securities, available-for-sale | 2,599 | 2,427 | 2,940 |
| Derivatives designated as cash flow hedges(1) | 1,316 | 1,165 | 206 |
| Other investments(2) | (21) | (25) | (7) |
| Net unrealized gains (losses) on investments | \$32,732 | \$28,474 | \$37,113 |

(1) See Note 21 for more information on cash flow hedges.
(2) As of December 31, 2016, there were no unrealized losses on held-to-maturity securities that were previously transferred from available-for-sale. Includes net unrealized losses on certain joint ventures that are strategic in nature and are included in "Other assets," and losses on notes associated with payables under a netting agreement.

## Repurchase Agreements and Securities Lending

In the normal course of business, the Company sells securities under agreements to repurchase and enters into securities lending transactions. The following tables set forth the composition of repurchase agreements as of the dates indicated:

|  | December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Remaining Contractual Maturities of the Agreements |  |  |  |  |
|  | Overnight \& Continuous | Up to 30 Days | 30 to 90 Days | Greater than 90 Days | Total |
|  |  |  | (in millions) |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$950 | \$6,417 | \$0 | \$0 | \$7,367 |
| Obligations of U.S. states and their political subdivisions | 0 | 0 | 0 | 0 | 0 |
| Foreign government bonds | 0 | 0 | 0 | 0 | 0 |
| U.S. corporate public securities | 0 | 0 | 0 | 0 | 0 |
| U.S. corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Foreign corporate public securities | 6 | 0 | 0 | 0 | 6 |
| Foreign corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Asset-backed securities | 0 | 0 | 0 | 0 | 0 |
| Commercial mortgage-backed securities | 0 | 0 | 0 | 0 | 0 |
| Residential mortgage-backed securities | 0 | 233 | 0 | 0 | 233 |
| Equity securities | 0 | 0 | 0 | 0 | 0 |
| Total repurchase agreements | \$956 | \$6,650 | \$0 | \$0 | \$7,606 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Remaining Contractual Maturities of the Agreements |  |  |  |  |
|  | Overnight \& Continuous | Up to 30 Days | 30 to 90 Days | Greater than 90 Days | Total |
|  |  |  | (in millions) |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$1,991 | \$4,513 | \$253 | \$0 | \$6,757 |
| Obligations of U.S. states and their political subdivisions | 0 | 0 | 0 | 0 | 0 |
| Foreign government bonds | 0 | 0 | 0 | 0 | 0 |
| U.S. corporate public securities | 11 | 0 | 0 | 0 | 11 |
| U.S. corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Foreign corporate public securities | 0 | 0 | 0 | 0 | 0 |
| Foreign corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Asset-backed securities | 0 | 0 | 0 | 0 | 0 |
| Commercial mortgage-backed securities | 0 | 0 | 0 | 0 | 0 |
| Residential mortgage-backed securities | 169 | 945 | 0 | 0 | 1,114 |
| Equity securities | 0 | 0 | 0 | 0 | 0 |
| Total repurchase agreements | \$2,171 | \$5,458 | \$253 | \$0 | \$7,882 |

The following tables set forth the composition of securities lending transactions as of the dates indicated:

|  | December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Remaining Contractual Maturities of the Agreements |  |  |  |  |
|  | Overnight \& Continuous | Up to 30 Days | 30 to 90 Days | Greater than 90 Days | Total |
|  |  |  | (in millions) |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies |  |  |  |  |  |
| Obligations of U.S. states and their political subdivisions | 18 | 0 | 0 | 0 | 18 |
| Foreign government bonds | 279 | 0 | 0 | 0 | 279 |
| U.S. corporate public securities | 2,731 | 0 | 0 | 0 | 2,731 |
| U.S. corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Foreign corporate public securities | 786 | 0 | 0 | 0 | 786 |
| Foreign corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Asset-backed securities | 0 | 0 | 0 | 0 | 0 |
| Commercial mortgage-backed securities | 0 | 0 | 0 | 0 | 0 |
| Residential mortgage-backed securities | 55 | 74 | 0 | 0 | 129 |
| Equity securities | 381 | 0 | 0 | 0 | 381 |
| Total securities lending transactions | \$4,259 | \$74 | \$0 | \$0 | \$4,333 |
|  | December 31, 2015 |  |  |  |  |
|  | Remaining Contractual Maturities of the Agreements |  |  |  |  |
|  | Overnight \& Continuous | Up to 30 Days | 30 to 90 Days | Greater than 90 Days | Total |
|  |  |  | (in millions) |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies $\qquad$ |  |  |  |  |  |
| Obligations of U.S. states and their political subdivisions | 4 | 0 | 0 | 0 | 4 |
| Foreign government bonds | 0 | 0 | 0 | 0 | 0 |
| U.S. corporate public securities | 1,401 | 86 | 0 | 0 | 1,487 |
| U.S. corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Foreign corporate public securities | 579 | 50 | 0 | 0 | 629 |
| Foreign corporate private securities | 0 | 0 | 0 | 0 | 0 |
| Asset-backed securities | 241 | 0 | 0 | 0 | 241 |
| Commercial mortgage-backed securities | 8 | 0 | 0 | 0 | 8 |
| Residential mortgage-backed securities | 0 | 97 | 0 | 0 | 97 |
| Equity securities | 936 | 0 | 0 | 0 | 936 |
| Total securities lending transactions. | \$3,263 | \$233 | \$0 | \$0 | \$3,496 |

## Securities Pledged, Restricted Assets and Special Deposits

The Company pledges as collateral investment securities it owns to unaffiliated parties through certain transactions, including securities lending, securities sold under agreements to repurchase, collateralized borrowings and postings of collateral with derivative

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

counterparties. At December 31, the carrying value of investments pledged to third parties as reported in the Consolidated Statements of Financial Position included the following:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in m | lions) |
| Fixed maturities | \$11,393 | \$11,732 |
| Trading account assets supporting insurance liabilities | 477 | 327 |
| Other trading account assets | 2 | 8 |
| Separate account assets | 3,386 | 2,128 |
| Equity securities .... | 368 | 903 |
| Total securities pledged | \$15,626 | \$15,098 |

At December 31, the carrying amount of the associated liabilities supported by the pledged collateral as reported in the Consolidated Statements of Financial Position included the following:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Securities sold under agreements to repurchase | \$ 7,606 | \$ 7,882 |
| Cash collateral for loaned securities | 4,333 | 3,496 |
| Separate account liabilities | 3,462 | 2,178 |
| Policyholders' account balances(1) | 1,001 | 1,001 |
| Total liabilities supported by the pledged co | \$16,402 | \$14,557 |

(1) Represents amounts supporting outstanding funding agreements.

In the normal course of its business activities, the Company accepts collateral that can be sold or repledged. The primary sources of this collateral are securities in customer accounts, securities purchased under agreements to resell, and postings of collateral from OTC derivative counterparties. The fair value of this collateral was approximately $\$ 7,185$ million at December 31, 2016 (the largest components of which include $\$ 1,595$ million of securities and $\$ 5,590$ million of cash from OTC derivative counterparties) and $\$ 7,794$ million at December 31, 2015 (the largest components of which include $\$ 2,195$ million of securities and $\$ 5,599$ million of cash from OTC derivative counterparties). A portion of the aforementioned securities, for both periods, had either been sold or repledged.

Assets of $\$ 78$ million and $\$ 162$ million at December 31, 2016 and 2015, respectively, were on deposit with governmental authorities or trustees, including certain restricted cash balances and securities. Restricted cash and securities of $\$ 54$ million and $\$ 136$ million at December 31, 2016 and 2015, respectively, were included in "Other assets." Additionally, assets carried at $\$ 3.3$ billion at December 31, 2016 were held in a trust established for the benefit of certain policyholders related to a reinsurance agreement between two wholly-owned subsidiaries. Assets carried at $\$ 605$ million and $\$ 603$ million at December 31, 2016 and 2015, respectively, were held in voluntary trusts established primarily to fund guaranteed dividends to certain policyholders and to fund certain employee benefits. Securities restricted as to sale amounted to $\$ 89$ million and $\$ 109$ million at December 31, 2016 and 2015, respectively. These amounts include member and activitybased stock associated with memberships in the Federal Home Loan Banks of New York and Boston.

## 5. VARIABLE INTEREST ENTITIES

In the normal course of its activities, the Company enters into relationships with various special-purpose entities and other entities that are deemed to be variable interest entities ("VIEs"). A VIE is an entity that either (1) has equity investors that lack certain essential characteristics of a controlling financial interest (including the ability to control activities of the entity, the obligation to absorb the entity's expected losses and the right to receive the entity's expected residual returns) or (2) lacks sufficient equity to finance its own activities without financial support provided by other entities, which in turn would be expected to absorb at least some of the expected losses of the VIE.

The Company is the primary beneficiary if the Company has (1) the power to direct the activities of the VIE that most significantly impact the economic performance of the entity and (2) the obligation to absorb losses of the entity that could be potentially significant to the VIE or the right to receive benefits from the entity that could be potentially significant. If the Company determines that it is the VIE's primary beneficiary, it consolidates the VIE.

## Consolidated Variable Interest Entities

The Company is the investment manager of certain asset-backed investment vehicles, commonly referred to as CLOs, and certain other vehicles for which the Company earns fee income for investment management services, including certain investment structures in which the Company's asset management business invests with other co-investors in investment funds referred to as feeder funds. The Company may sell or syndicate investments through these vehicles, principally as part of the strategic investing activity of the Company's asset management businesses. Additionally, the Company may invest in securities issued by these vehicles. CLOs raise capital by issuing debt securities, and use the proceeds to purchase investments, typically interest-bearing financial instruments. The Company has analyzed these relationships and determined that for certain CLOs and other investment structures it is the primary beneficiary and consolidates these

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

entities. This analysis includes a review of (1) the Company's rights and responsibilities as investment manager and (2) variable interests (if any) held by the Company. The assets of these VIEs are restricted and must be used first to settle liabilities of the VIE. The Company is not required to provide, and has not provided, material financial or other support to any of these VIEs. Effective January 1, 2016, the Company adopted new FASB guidance (ASU 2015-02, Consolidation (Topic 810): Amendments to Consolidation Analysis) that resulted in the deconsolidation of certain of its previously consolidated CLOs. See Note 2 for additional information.

Additionally, the Company is the primary beneficiary of certain VIEs in which the Company has invested, as part of its investment activities, but for which it is not the investment manager. These include structured investments issued by a VIE that manages yen-denominated investments coupled with cross-currency coupon swap agreements thereby creating synthetic dual currency investments. The Company's involvement in the structuring of these investments combined with its economic interest indicates that the Company is the primary beneficiary. The Company has not provided material financial support or other support that was not contractually required to these VIEs.

The table below reflects the carrying amount and balance sheet caption in which the assets and liabilities of consolidated VIEs are reported. The liabilities primarily comprise obligations under debt instruments issued by the VIEs that are non-recourse to the Company. The creditors of these VIEs do not have recourse to the Company in excess of the assets contained within the VIEs.

|  | Consolid Which the Investm |  | IEs for any is the anager | Other Co | ated VIEs |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dece |  |  |  | 31, |
|  | 2016(1) |  | 2015 | 2016 | 2015 |
|  |  |  | (in m | ions) |  |
| Fixed maturities, available-for-sale | \$ 65 |  | \$ 0 | \$ 269 | \$ 179 |
| Fixed maturities, held-to-maturity | 81 |  | 0 | 783 | 760 |
| Trading account assets supporting insurance liabilities | 0 |  | 0 | 9 | 10 |
| Other trading account assets | 2,140 |  | 9,536 | 0 | 0 |
| Commercial mortgage and other loans | 503 |  | 0 | 0 | 300 |
| Other long-term investments | 1,083 |  | 0 | 114 | 155 |
| Cash and cash equivalents | 618 |  | 337 | 1 | 1 |
| Accrued investment income | 10 |  | 56 | 4 | 3 |
| Other assets . | 424 |  | 324 | 1 | 3 |
| Total assets of consolidated VIEs | \$4,924 |  | \$10,253 | \$1,181 | \$1,411 |
| Notes issued by consolidated VIEs | \$2,150 |  | \$ 8,597 | \$ 0 | \$ 0 |
| Other liabilities | 611 |  | 674 | 7 | 3 |
| Total liabilities of consolidated VIEs | \$2,761 |  | \$ 9,271 | \$ 7 | \$ 3 |

(1) As a result of the adoption of the new accounting guidance ASU 2015-02 effective January 1, 2016, total assets of consolidated VIEs reflects $\$ 1,386$ million related to VIEs whose beneficial interests are wholly-owned by consolidated subsidiaries.

Recourse is limited to the assets of the respective VIE and does not extend to the general credit of Prudential Financial. As of December 31, 2016, the maturities of these obligations were greater than five years.

## Unconsolidated Variable Interest Entities

The Company has determined that it is not the primary beneficiary of certain VIEs for which it is the investment manager. These VIEs consist primarily of CLOs and investment funds for which the Company has determined that it is not the primary beneficiary as it does not have both (1) the power to direct the activities of the VIE that most significantly impact the economic performance of the entity and (2) the obligation to absorb losses of the entity that could be potentially significant to the VIE or the right to receive benefits from the entity that could be potentially significant. The Company's maximum exposure to loss resulting from its relationship with unconsolidated VIEs for which it is the investment manager is limited to its investment in the VIEs, which was $\$ 515$ million and $\$ 218$ million at December 31, 2016 and 2015, respectively. These investments are reflected in "Fixed maturities, available-for-sale," "Other trading account assets, at fair value" and "Other long-term investments." There are no liabilities associated with these unconsolidated VIEs on the Company's Consolidated Statements of Financial Position.

In the normal course of its activities, the Company will invest in joint ventures and limited partnerships. These ventures include hedge funds, private equity funds and real estate-related funds and may or may not be VIEs. The Company's maximum exposure to loss on these investments, both VIEs and non-VIEs, is limited to the amount of its investment. The Company has determined that it is not required to consolidate these entities because either (1) it does not control them or (2) it does not have the obligation to absorb losses of the entities that could be potentially significant to the entities or the right to receive benefits from the entities that could be potentially significant. The Company classifies these investments as "Other long-term investments" and its maximum exposure to loss associated with these entities was $\$ 8,010$ million and $\$ 7,532$ million as of December 31, 2016 and 2015, respectively.

In addition, in the normal course of its activities, the Company will invest in structured investments including VIEs for which it is not the investment manager. These structured investments typically invest in fixed income investments and are managed by third parties and

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

include asset-backed securities, commercial mortgage-backed securities and residential mortgage-backed securities. The Company's maximum exposure to loss on these structured investments, both VIEs and non-VIEs, is limited to the amount of its investment. See Note 4 for details regarding the carrying amounts and classification of these assets. The Company has not provided material financial or other support that was not contractually required to these structures. The Company has determined that it is not the primary beneficiary of these structures due to the fact that it does not control these entities.

## 6. DEFERRED POLICY ACQUISITION COSTS

The balances of and changes in DAC as of and for the years ended December 31, are as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Balance, beginning of year | \$16,718 | \$15,971 | \$16,512 |
| Capitalization of commissions, sales and issue expenses | 2,845 | 2,653 | 2,694 |
| Amortization-Impact of assumption and experience unlocking and true-ups | 445 | 280 | 629 |
| Amortization-All other | $(2,322)$ | $(2,400)$ | $(2,602)$ |
| Change in unrealized investment gains and losses | (199) | 477 | (697) |
| Foreign currency translation and other | 174 | (263) | (565) |
| Balance, end of year | \$17,661 | \$16,718 | \$15,971 |

## 7. INVESTMENTS IN OPERATING JOINT VENTURES

The Company has made investments in certain joint ventures that are strategic in nature and made other than for the sole purpose of generating investment income. These investments are accounted for under the equity method of accounting and are included in "Other assets" in the Company's Consolidated Statements of Financial Position. The earnings from these investments are included on an after-tax basis in "Equity in earnings of operating joint ventures, net of taxes" in the Company's Consolidated Statements of Operations. The summarized financial information for the Company's operating joint ventures has been included in the summarized combined financial information for all significant equity method investments shown in Note 4.

The following table sets forth information related to the Company's investments in operating joint ventures as of and for the years ended December 31:

|  | 2016(1) | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Investment in operating joint ventures | \$994 | \$341 | \$325 |
| Dividends received from operating joint ventures | \$ 60 | \$ 27 | \$ 27 |
| After-tax equity earnings of operating joint ventures | \$ 49 | \$ 15 | \$ 16 |

(1) Results include the impact of the Company's investment in AFP Habitat in March of 2016.

The Company has made investments in operating joint ventures through its Asset Management and International Insurance segments and its Corporate and Other operations. For the years ended December 31, 2016, 2015 and 2014, the Company recognized $\$ 32$ million, $\$ 34$ million and \$33 million, respectively, of asset management fee income from these transactions.

## 8. VALUE OF BUSINESS ACQUIRED

The balances of and changes in VOBA as of and for the years ended December 31, are as follows:

|  | 2016(1) | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Balance, beginning of year | \$2,828 | \$2,836 | \$3,675 |
| Acquisitions | 0 | 0 | 7 |
| Amortization-Impact of assumption and experience unlocking and true-ups | (246) | 128 | (175) |
| Amortization-All other | (351) | (385) | (420) |
| Change in unrealized investment gains and losses | (112) | 214 | (89) |
| Interest(2) | 81 | 86 | 95 |
| Foreign currency translation | 114 | (57) | (257) |
| Other | 0 | 6 | 0 |
| Balance, end of year | \$2,314 | \$2,828 | \$2,836 |

(1) The VOBA balances at December 31, 2016 were $\$ 198$ million, $\$ 33$ million, $\$ 1,290$ million, $\$ 0$ million, $\$ 786$ million, and $\$ 7$ million related to the insurance transactions associated with the CIGNA, Prudential Annuities Holding Co., Gibraltar Life, Aoba Life, The Hartford Life Business, and Gibraltar BSN Life Berhad, respectively. The weighted average remaining expected life of VOBA varies by product. The weighted average remaining expected lives were approximately 12, 5, 8, 7, 8, and 16 years for the VOBA related to CIGNA, Prudential Annuities Holding Co., Gibraltar Life., Aoba Life, The Hartford Life Business, and Gibraltar BSN Life Berhad, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

(2) The interest accrual rates vary by product. The interest rates for 2016 were $6.40 \%, 6.00 \%, 1.28 \%$ to $2.87 \%, 2.60 \%, 3.00 \%$ to $6.17 \%$ and $4.07 \%$ to $5.51 \%$ for the VOBA related to CIGNA, Prudential Annuities Holding Co., Gibraltar Life, Aoba Life, The Hartford Life Business, and Gibraltar BSN Life Berhad, respectively. The interest rates for 2015 were $6.40 \%, 6.05 \%, 1.28 \%$ to $2.87 \%, 2.60 \%, 3.00 \%$ to $6.17 \%$ and $4.07 \%$ to $5.51 \%$ for the VOBA related to CIGNA, Prudential Annuities Holding Co., Gibraltar Life, Aoba Life, The Hartford Life Business, and Gibraltar BSN Life Berhad, respectively. The interest rates for 2014 were $6.40 \%, 6.10 \%, 1.28 \%$ to $2.87 \%, 2.60 \%, 3.00 \%$ to $6.17 \%$ and $4.07 \%$ to $5.51 \%$ for the VOBA related to CIGNA, Prudential Annuities Holding Co., Gibraltar Life, Aoba Life, the Hartford Life Business, and Gibraltar BSN Life Berhad, respectively.

The following table provides estimated future amortization, net of interest, for the periods indicated.

|  | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | milli |  |  |
| Estimated future VOBA amortization | \$236 | \$210 | \$187 | \$168 | \$156 |

## 9. GOODWILL AND OTHER INTANGIBLES

The changes in the book value of goodwill by area are as follows:

|  | Retirement | Asset <br> Management | International Insurance | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (in milli |  |  |
| Balance at December 31, 2013 : |  |  |  |  |
| Gross Goodwill | \$444 | \$240 | \$155 | \$839 |
| Accumulated Impairment Losses | 0 | 0 | 0 | 0 |
| Net Goodwill | 444 | 240 | 155 | 839 |
| 2014 Activity: |  |  |  |  |
| Acquisitions | 0 | 0 | 18 | 18 |
| Other(1) | 0 | (5) | (21) | (26) |
| Balance at December 31, 2014 : |  |  |  |  |
| Gross Goodwill | 444 | 235 | 152 | 831 |
| Accumulated Impairment Losses | 0 | 0 | 0 | 0 |
| Net Goodwill | 444 | 235 | 152 | 831 |
| 2015 Activity: |  |  |  |  |
| Acquisitions | 0 | 0 | 0 | 0 |
| Other(1) | 0 | (4) | (3) | (7) |
| Balance at December 31, 2015: |  |  |  |  |
| Gross Goodwill | 444 | 231 | 149 | 824 |
| Accumulated Impairment Losses | 0 | 0 | 0 | 0 |
| Net Goodwill | 444 | 231 | 149 | 824 |
| 2016 Activity: |  |  |  |  |
| Acquisitions | 0 | 0 | 0 | 0 |
| Other(1) | 0 | (1) | 10 | 9 |
| Balance at December 31, 2016: |  |  |  |  |
| Gross Goodwill | 444 | 230 | 159 | 833 |
| Accumulated Impairment Losses | 0 | 0 | 0 | 0 |
| Net Goodwill | \$444 | \$230 | \$159 | \$833 |

(1) Other represents foreign currency translation and purchase price adjustments.

The Company tests goodwill for impairment annually as of December 31 and more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, as discussed in further detail in Note 2.

The Company performed goodwill impairment testing using the quantitative approach for all reporting units that had goodwill at December 31, 2016 and 2015, and no impairments were recorded.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Other Intangibles

Other intangible balances at December 31, are as follows:

|  | 2016 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
|  | (in millions) |  |  |  |  |  |
| Subject to amortization: |  |  |  |  |  |  |
| Mortgage servicing rights | \$548 | \$(341) | \$207 | \$500 | \$(302) | \$198 |
| Customer relationships | 243 | (179) | 64 | 268 | (196) | 72 |
| Other | 138 | (102) | 36 | 72 | (42) | 30 |
| Not subject to amortization | 3 | N/A | 3 | 3 | N/A | 3 |
| Total |  |  | \$310 |  |  | \$303 |

The fair values of net mortgage servicing rights were $\$ 217$ million and $\$ 203$ million at December 31, 2016 and 2015, respectively. Amortization expense for other intangibles was $\$ 116$ million, $\$ 64$ million and $\$ 55$ million for the years ending December 31, 2016, 2015 and 2014, respectively. Amortization expense for other intangibles is expected to be approximately $\$ 49$ million in 2017, $\$ 42$ million in 2018, $\$ 37$ million in 2019, $\$ 31$ million in 2020 and $\$ 27$ million in 2021. The amortization expense amounts listed above for 2016, 2015 and 2014 do not include impairments recorded for mortgage servicing rights or other intangibles. See the non-recurring fair value measurements section of Note 20 for more information regarding these impairments.

## 10. POLICYHOLDERS' LIABILITIES

## Future Policy Benefits

Future policy benefits at December 31 for the years indicated are as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in m |  |
| Life insurance | \$161,406 | \$148,100 |
| Individual and group annuities and supplementary contracts | 63,486 | 60,493 |
| Other contract liabilities | 13,173 | 12,872 |
| Subtotal future policy benefits excluding unpaid claims and claim adjustment expenses | 238,065 | 221,465 |
| Unpaid claims and claim adjustment expenses | 2,843 | 2,919 |
| Total future policy benefits | \$240,908 | \$224,384 |

Life insurance liabilities include reserves for death and endowment policy benefits, terminal dividends and certain health benefits. Individual and group annuities and supplementary contracts liabilities include reserves for life contingent immediate annuities and life contingent group annuities. Other contract liabilities include unearned premiums and certain other reserves for group, annuities and individual life and health products.

Future policy benefits for individual participating traditional life insurance are based on the net level premium method, calculated using the guaranteed mortality and nonforfeiture interest rates which range from $2.5 \%$ to $7.5 \%$. Participating insurance represented $4 \%$ of direct individual life insurance in force for both December 31, 2016 and 2015, and $14 \%, 16 \%$ and $16 \%$ of direct individual life insurance premiums for 2016, 2015 and 2014, respectively.

Future policy benefits for individual non-participating traditional life insurance policies, group and individual long-term care policies and individual health insurance policies are generally equal to the present value of future benefit payments and related expenses, less the present value of future net premiums. Assumptions as to mortality, morbidity and persistency are based on the Company's experience, industry data, and/or other factors, when the basis of the reserve is established. Interest rates used in the determination of the present values range from $0.2 \%$ to $9.5 \%$; less than $1 \%$ of the reserves are based on an interest rate in excess of $8 \%$.

Future policy benefits for individual and group annuities and supplementary contracts with life contingencies are generally equal to the present value of expected future payments. Assumptions as to mortality are based on the Company's experience, industry data, and/or other factors, when the basis of the reserve is established. The interest rates used in the determination of the present values range from $0.4 \%$ to $11.3 \%$; less than $1 \%$ of the reserves are based on an interest rate in excess of $8 \%$.

Future policy benefits for other contract liabilities are generally equal to the present value of expected future payments based on the Company's experience, except for example, certain group insurance coverages for which future policy benefits are equal to gross unearned premium reserves. The interest rates used in the determination of the present values range from $1.0 \%$ to $7.3 \%$.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The Company's liability for future policy benefits is also inclusive of liabilities for guaranteed benefits related to certain long-duration life and annuity contracts. Liabilities for guaranteed benefits with embedded derivative features are primarily in "other contract liabilities" in the table above. The remaining liabilities for guaranteed benefits are primarily reflected with the underlying contract. See Note 11 for additional information regarding liabilities for guaranteed benefits related to certain long-duration life and annuity contracts.

Premium deficiency reserves included in "Future policy benefits" are established, if necessary, when the liability for future policy benefits plus the present value of expected future gross premiums are determined to be insufficient to provide for expected future policy benefits and expenses. Premium deficiency reserves have been recorded for the group single premium annuity business, which consists of limited-payment, long-duration traditional, non-participating annuities; structured settlements; single premium immediate annuities with life contingencies; long-term care; and for certain individual health policies. Additionally, in certain instances the policyholder liability for a particular line of business may not be deficient in the aggregate to trigger loss recognition, but the pattern of earnings may be such that profits are expected to be recognized in earlier years followed by losses in later years. In these situations, accounting standards require that an additional PFL liability be recognized by an amount necessary to sufficiently offset the losses that would be recognized in later years. A PFL liability is included in "Future policy benefits" and is predominately associated with certain interest-sensitive life contracts.

Unpaid claims and claim adjustment expenses primarily reflect the Company's estimate of future disability claim payments and expenses as well as estimates of claims incurred but not yet reported as of the balance sheet dates related to group disability products. Unpaid claim liabilities that are discounted use interest rates ranging from $2.6 \%$ to $6.4 \%$.

## Policyholders' Account Balances

Policyholders' account balances at December 31 for the years indicated are as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in m | lions) |
| Individual annuities | \$ 40,338 | \$ 37,384 |
| Group annuities | 28,350 | 27,141 |
| Guaranteed investment contracts and guaranteed interest accounts | 14,528 | 14,122 |
| Funding agreements | 4,794 | 3,997 |
| Interest-sensitive life contracts | 34,452 | 32,502 |
| Dividend accumulation and other | 22,743 | 21,638 |
| Total policyholders' account balances | \$145,205 | \$136,784 |

Policyholders' account balances primarily represent an accumulation of account deposits plus credited interest less withdrawals, expense charges and mortality charges, if applicable. These policyholders' account balances also include provisions for benefits under non-life contingent payout annuities. Included in "Funding agreements" at December 31, 2016 and 2015 are $\$ 3,758$ million and $\$ 2,957$ million, respectively, related to the Company's Funding Agreement Notes Issuance Program ("FANIP"). Under this program, which has a maximum authorized amount of $\$ 15$ billion of medium-term notes and $\$ 3$ billion of commercial paper, Delaware statutory trusts issue short-term commercial paper and/or medium-term notes to investors that are secured by funding agreements issued to the trusts by Prudential Insurance. The outstanding commercial paper and notes have fixed or floating interest rates that range from $0.0 \%$ to $2.6 \%$ and original maturities ranging from seven days to five years. Included in the amounts at December 31, 2016 and 2015 is the medium-term note liability, which is carried at amortized cost, of $\$ 3,210$ million and $\$ 2,958$ million, respectively and short-term note liability of $\$ 550$ million and $\$ 0$, respectively.

Also included in "Funding agreements" are collateralized funding agreements issued to the Federal Home Loan Bank of New York ("FHLBNY") of $\$ 1,001$ million for both December 31, 2016 and 2015. These obligations, which are carried at amortized cost, have fixed or floating interest rates that range from $1.1 \%$ to $1.7 \%$ and original maturities ranging from four to seven years. For additional details on the FHLBNY program, see Note 14.

Interest crediting rates range from $0 \%$ to $7.5 \%$ for interest-sensitive life contracts and from $0 \%$ to $13.3 \%$ for contracts other than interest-sensitive life. Less than $1 \%$ of policyholders' account balances have interest crediting rates in excess of $8 \%$.

## 11. CERTAIN LONG-DURATION CONTRACTS WITH GUARANTEES

The Company issues variable annuity contracts through its separate accounts for which investment income and investment gains and losses accrue directly to, and investment risk is borne by, the contractholder. The Company also issues variable annuity contracts with general and separate account options where the Company contractually guarantees to the contractholder a return of no less than total deposits made to the contract adjusted for any partial withdrawals ("return of net deposits"). In certain of these variable annuity contracts, the Company also contractually guarantees to the contractholder a return of no less than (1) total deposits made to the contract adjusted for any partial withdrawals plus a minimum return ("minimum return"), and/or (2) the highest contract value on a specified date adjusted for any withdrawals ("contract value"). These guarantees include benefits that are payable in the event of death, annuitization or at specified dates during the accumulation period and withdrawal and income benefits payable during specified periods. The Company also issues annuity contracts with market value adjusted investment options ("MVAs"), which provide for a return of principal plus a fixed rate of return if held-to-maturity, or, alternatively, a "market adjusted value" if surrendered prior to maturity or if funds are reallocated to other

## PRUDENTIAL FINANCIAL, INC.

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investment options. The market value adjustment may result in a gain or loss to the Company, depending on crediting rates or an indexed rate at surrender, as applicable. The Company also issues fixed deferred annuity contracts without MVA that have a guaranteed credited rate and annuity benefit.

In addition, the Company issues certain variable life, variable universal life and universal life contracts where the Company contractually guarantees to the contractholder a death benefit even when there is insufficient value to cover monthly mortality and expense charges, whereas otherwise the contract would typically lapse ("no-lapse guarantee"). Variable life and variable universal life contracts are offered with general and separate account options.

The assets supporting the variable portion of all variable annuities are carried at fair value and reported as "Separate account assets" with an equivalent amount reported as "Separate account liabilities." Amounts assessed against the contractholders for mortality, administration, and other services are included within revenue in "Policy charges and fee income" and changes in liabilities for minimum guarantees are generally included in "Policyholders' benefits" or "Realized investment gains (losses), net."

For those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date. The Company's primary risk exposures for these contracts relates to actual deviations from, or changes to, the assumptions used in the original pricing of these products, including fixed income and equity market returns, contract lapses and contractholder mortality.

For guarantees of benefits that are payable at annuitization, the net amount at risk is generally defined as the present value of the minimum guaranteed annuity payments available to the contractholder determined in accordance with the terms of the contract in excess of the current account balance. The Company's primary risk exposures for these contracts relates to actual deviations from, or changes to, the assumptions used in the original pricing of these products, including fixed income and equity market returns, timing of annuitization, contract lapses and contractholder mortality.

For guarantees of benefits that are payable at withdrawal, the net amount at risk is generally defined as the present value of the minimum guaranteed withdrawal payments available to the contractholder determined in accordance with the terms of the contract in excess of the current account balance. For guarantees of accumulation balances, the net amount at risk is generally defined as the guaranteed minimum accumulation balance minus the current account balance. The Company's primary risk exposures for these contracts relates to actual deviations from, or changes to, the assumptions used in the original pricing of these products, including equity market returns, interest rates, market volatility and contractholder behavior.

The Company's contracts with guarantees may offer more than one type of guarantee in each contract; therefore, the amounts listed may not be mutually exclusive. The liabilities related to the net amount at risk are reflected within "Future policy benefits." As of December 31, 2016 and 2015, the Company had the following guarantees associated with these contracts, by product and guarantee type:

|  | December 31, 2016 |  |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | In the Event of Death | At An Accu | nnuitization / umulation(1) | In the Event of Death | At Annuitization / Accumulation(1) |
|  | (\$ in millions) |  |  |  |  |
| Annuity Contracts |  |  |  |  |  |
| Return of net deposits |  |  |  |  |  |
| Account value | \$119,433 |  | 152 | \$115,317 | 142 |
| Net amount at risk | \$ 493 | \$ | 0 | \$ 739 | \$ 0 |
| Average attained age of contractholders | 65 years |  | 66 years | 65 years | 64 years |
| Minimum return or contract value |  |  |  |  |  |
| Account value | \$ 33,843 |  | 135,462 | \$ 34,494 | \$ 131,005 |
| Net amount at risk | \$ 3,714 |  | 5,788 | \$ 4,212 | \$ 5,459 |
| Average attained age of contractholders | 67 years |  | 65 years | 67 years | 64 years |
| Average period remaining until earliest expected annuitization | N/A |  | 0.27 years | N/A | 0.28 years |

(1) Includes income and withdrawal benefits.

| December 31, |  |
| :---: | :---: |
| 2016 | 2015 |
| In the Event of Death |  |
| (\$ in millions) |  |
| \$ 8,144 | \$ 7,643 |
| \$ 14,513 | \$ 13,364 |
| \$225,084 | \$211,428 |
| 56 years | 56 years |

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## Notes to Consolidated Financial Statements

Account balances of variable annuity contracts with guarantees were invested in separate account investment options as follows:

|  | December 31, |  |
| :---: | :---: | :---: |
|  | 2016 | 2015 |
|  | (in millions) |  |
| Equity funds | \$ 86,751 | \$ 88,992 |
| Bond funds | 48,789 | 46,642 |
| Balanced funds | 914 | 843 |
| Money market funds | 10,124 | 6,355 |
| Total | \$146,578 | \$142,832 |

In addition to the amounts invested in separate account investment options above, $\$ 8,566$ million at December 31, 2016, and $\$ 8,714$ million at December 31, 2015, of account balances of variable annuity contracts with guarantees, inclusive of contracts with MVA features, were invested in general account investment options. For the years ended December 31, 2016, 2015 and 2014, there were no transfers of assets, other than cash, from the general account to any separate account, and accordingly no gains or losses recorded.

## Liabilities for Guarantee Benefits

The table below summarizes the changes in general account liabilities for guarantees. The liabilities for guaranteed minimum death benefits ("GMDB"), and guaranteed minimum income benefits ("GMIB") are included in "Future policy benefits" and the related changes in the liabilities are included in "Policyholders' benefits." Guaranteed minimum accumulation benefits ("GMAB"), guaranteed minimum withdrawal benefits ("GMWB"), and guaranteed minimum income and withdrawal benefits ("GMIWB") are accounted for as embedded derivatives and are recorded at fair value within "Future policy benefits." Changes in the fair value of these derivatives, including changes in the Company's own risk of non-performance, along with any fees attributed or payments made relating to the derivative, are recorded in "Realized investment gains (losses), net." See Note 20 for additional information regarding the methodology used in determining the fair value of these embedded derivatives. The Company maintains a portfolio of derivative investments that serve as a partial hedge of the risks associated with these products, for which the changes in fair value are also recorded in "Realized investment gains (losses), net." This portfolio of derivative investments does not qualify for hedge accounting treatment under U.S. GAAP. Additionally, the Company externally reinsures the guaranteed benefit features associated with certain contracts. See Note 13 for further information regarding the external reinsurance arrangement.

|  | GMDB |  | GMIB | $\begin{gathered} \text { GMAB/ } \\ \text { GMWB/ } \\ \text { GMIWB } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Variable Life, Variable Universal Life and Universal Life | Annuity | Annuity | Annuity |
|  | (in millions) |  |  |  |
| Balance at December 31, 2013 | \$1,795 | \$461 | \$397 | \$ 441 |
| Incurred guarantee benefits(1)(3) | 794 | 245 | 40 | 7,741 |
| Paid guarantee benefits and other | (18) | (68) | (15) | 0 |
| Change in unrealized investment gains and losses(3) | 283 | 4 | 44 | 0 |
| Other(2)(3) | (4) | 0 | 1 | 0 |
| Balance at December 31, 2014 | 2,850 | 642 | 467 | 8,182 |
| Incurred guarantee benefits(1)(3) | 517 | 167 | (40) | 252 |
| Paid guarantee benefits | (22) | (85) | (16) | 0 |
| Change in unrealized investment gains and losses(3) | (193) | (10) | 41 | 0 |
| Other(2)(3) | (2) | 0 | (12) | (1) |
| Balance at December 31, 2015 | 3,150 | 714 | 440 | 8,433 |
| Incurred guarantee benefits(1) | 927 | 98 | (18) | (194) |
| Paid guarantee benefits | (36) | (91) | (15) | 0 |
| Change in unrealized investment gains and losses | 102 | 0 | 49 | 0 |
| Other(2) | 0 | 0 | 18 | (1) |
| Balance at December 31, 2016 | \$4,143 | \$721 | \$474 | \$8,238 |

[^10]
## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The GMDB liability is determined each period end by estimating the accumulated value of a portion of the total assessments to date less the accumulated value of the guaranteed death benefits in excess of the account balance. The GMIB liability associated with variable annuities is determined each period by estimating the accumulated value of a portion of the total assessments to date less the accumulated value of the projected income benefits in excess of the account balance. The portion of assessments used is chosen such that, at issue the present value of expected death benefits or expected income benefits in excess of the projected account balance and the portion of the present value of total expected assessments over the lifetime of the contracts are equal. The GMIB liability associated with fixed annuities is determined each period by estimating the present value of projected income benefits in excess of the account balance. The Company regularly evaluates the estimates used and adjusts the GMDB and GMIB liability balances, with an associated charge or credit to earnings, if actual experience or other evidence suggests that earlier estimates should be revised.

The GMAB features provide the contractholder with a guaranteed return of initial account value or an enhanced value if applicable. The most significant of the Company's GMAB features are the guaranteed return option features, which includes an automatic rebalancing element that reduces the Company's exposure to these guarantees. The GMAB liability is calculated as the present value of future expected payments in excess of the account balance less the present value of future expected rider fees attributable to the embedded derivative feature.

The GMWB features provide the contractholder with access to a guaranteed remaining balance if the account value is reduced to zero through a combination of market declines and withdrawals. The guaranteed remaining balance is generally equal to the protected value under the contract, which is initially established as the greater of the account value or cumulative deposits when withdrawals commence, less cumulative withdrawals. The contractholder also has the option, after a specified time period, to reset the guaranteed remaining balance to the then current account value, if greater. The contractholder accesses the guaranteed remaining balance through payments over time, subject to maximum annual limits. The GMWB liability is calculated as the present value of future expected payments to customers less the present value of future expected rider fees attributable to the embedded derivative feature.

The GMIWB features, taken collectively, provide a contractholder two optional methods to receive guaranteed minimum payments over time, a "withdrawal" option or an "income" option. The withdrawal option (which was available under only one of the GMIWBs and is no longer offered) guarantees that a contractholder can withdraw an amount each year until the cumulative withdrawals reach a total guaranteed balance. The income option (which varies among the Company's GMIWBs) in general guarantees the contractholder the ability to withdraw an amount each year for life (or for joint lives, in the case of any spousal version of the benefit) where such amount is equal to a percentage of a protected value under the benefit. The contractholder also has the potential to increase this annual amount, based on certain subsequent increases in account value that may occur. The GMIWB can be elected by the contractholder upon issuance of an appropriate deferred variable annuity contract or at any time following contract issue prior to annuitization. Certain GMIWB features include an automatic rebalancing element that reduces the Company's exposure to these guarantees. The GMIWB liability is calculated as the present value of future expected payments to customers less the present value of future expected rider fees attributable to the embedded derivative feature.

## Sales Inducements

The Company defers sales inducements and amortizes them over the anticipated life of the policy using the same methodology and assumptions used to amortize DAC. DSI is included in "Other assets." The Company has offered various types of sales inducements including: (1) a bonus whereby the policyholder's initial account balance is increased by an amount equal to a specified percentage of the customer's initial deposit; (2) additional credits after a certain number of years a contract is held; and (3) enhanced interest crediting rates that are higher than the normal general account interest rate credited in certain product lines. Changes in DSI, reported as "Interest credited to policyholders' account balances," are as follows:

|  | Sales <br> Inducements |
| :---: | :---: |
|  | (in millions) |
| Balance at December 31, 2013 | \$1,813 |
| Capitalization | 22 |
| Amortization-Impact of assumption and experience unlocking and true-ups | 81 |
| Amortization-All other | (403) |
| Change in unrealized investment gains and losses | 1 |
| Balance at December 31, 2014 | 1,514 |
| Capitalization | 8 |
| Amortization-Impact of assumption and experience unlocking and true-ups | 43 |
| Amortization-All other | (392) |
| Change in unrealized investment gains and losses | 16 |
| Balance at December 31, 2015 | 1,189 |
| Capitalization | 47 |
| Amortization-Impact of assumption and experience unlocking and true-ups | 118 |
| Amortization-All other | (231) |
| Change in unrealized investment gains and losses | 4 |
| Balance at December 31, 2016 | \$1,127 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 12. CLOSED BLOCK

On the date of demutualization, Prudential Insurance established a closed block for certain in force participating insurance policies and annuity products, along with corresponding assets used for the payment of benefits and policyholders' dividends on these products, (collectively the "Closed Block"), and ceased offering these participating products. The recorded assets and liabilities were allocated to the Closed Block at their historical carrying amounts. The Closed Block forms the principal component of the Closed Block division. See Note 22 for financial information on the Closed Block division. The insurance policies and annuity contracts comprising the Closed Block are managed in accordance with the Plan of Reorganization approved by the New Jersey Department of Banking and Insurance ("NJDOBI") on December 18, 2001, and Prudential Insurance is directly obligated for the insurance policies and annuity contracts in the Closed Block. The Class B Repurchase discussed in Note 1 did not change the Closed Block assets allocated to support the Closed Block's liabilities, policyholder dividend scales or the methodology for determining policyholder dividends, or impact the guaranteed benefits, premiums or dividends for Closed Block policyholders.

The policies included in the Closed Block are specified individual life insurance policies and individual annuity contracts that were in force on the date of demutualization and for which Prudential Insurance is currently paying or expects to pay experience-based policy dividends. Assets have been allocated to the Closed Block in an amount that has been determined to produce cash flows which, together with revenues from policies included in the Closed Block, are expected to be sufficient to support obligations and liabilities relating to these policies, including provision for payment of benefits, certain expenses and taxes and to provide for continuation of the policyholder dividend scales in effect in 2000 , assuming experience underlying such scales continues. To the extent that, over time, cash flows from the assets allocated to the Closed Block and claims and other experience related to the Closed Block are, in the aggregate, more or less favorable than what was assumed when the Closed Block was established, total dividends paid to Closed Block policyholders may be greater than or less than the total dividends that would have been paid to these policyholders if the policyholder dividend scales in effect in 2000 had been continued. Any cash flows in excess of amounts assumed will be available for distribution over time to Closed Block policyholders and will not be available to stockholders. If the Closed Block has insufficient funds to make guaranteed policy benefit payments, such payments will be made from Prudential Insurance's assets outside of the Closed Block. The Closed Block will continue in effect as long as any policy in the Closed Block remains in force unless, with the consent of the New Jersey insurance regulator, it is terminated earlier.

The excess of Closed Block liabilities over Closed Block assets at the date of the demutualization (adjusted to eliminate the impact of related amounts in AOCI) represented the estimated maximum future earnings at that date from the Closed Block expected to result from operations attributed to the Closed Block after income taxes. In establishing the Closed Block, the Company developed an actuarial calculation of the timing of such maximum future earnings. If actual cumulative earnings of the Closed Block from inception through the end of any given period are greater than the expected cumulative earnings, only the expected earnings will be recognized in income. Any excess of actual cumulative earnings over expected cumulative earnings will represent undistributed accumulated earnings attributable to policyholders, which are recorded as a policyholder dividend obligation. The policyholder dividend obligation represents amounts to be paid to Closed Block policyholders as an additional policyholder dividend unless otherwise offset by future Closed Block performance that is less favorable than originally expected. If the actual cumulative earnings of the Closed Block from its inception through the end of any given period are less than the expected cumulative earnings of the Closed Block, the Company will recognize only the actual earnings in income. However, the Company may reduce policyholder dividend scales, which would be intended to increase future actual earnings until the actual cumulative earnings equaled the expected cumulative earnings.

As of December 31, 2016 and 2015, the Company recognized a policyholder dividend obligation of $\$ 1,647$ million and $\$ 1,694$ million, respectively, to Closed Block policyholders for the excess of actual cumulative earnings over the expected cumulative earnings. Additionally, accumulated net unrealized investment gains that have arisen subsequent to the establishment of the Closed Block have been reflected as a policyholder dividend obligation of $\$ 3,011$ million and $\$ 2,815$ million at December 31, 2016 and 2015, respectively, to be paid to Closed Block policyholders unless offset by future experience, with a corresponding amount reported in AOCI.

On December 5, 2014 and December 4, 2015, Prudential Insurance's Board of Directors acted to increase the 2015 and 2016 dividends payable on Closed Block policies, respectively. On December 9, 2016, Prudential Insurance's Board of Directors approved a continuation of the dividends payable on Closed Block policies for 2017. These actions resulted in an increase of approximately $\$ 60$ million, $\$ 58$ million and $\$ 32$ million in the liability for policyholders dividends recognized for the years ended December 31, 2014, 2015 and 2016, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Closed Block liabilities and assets designated to the Closed Block at December 31, as well as maximum future earnings to be recognized from Closed Block liabilities and Closed Block assets, are as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Closed Block liabilities |  |  |
| Future policy benefits | \$49,281 | \$49,538 |
| Policyholders' dividends payable | 932 | 945 |
| Policyholders' dividend obligation | 4,658 | 4,509 |
| Policyholders' account balances | 5,204 | 5,250 |
| Other Closed Block liabilities | 4,262 | 4,171 |
| Total Closed Block liabilities | 64,337 | 64,413 |
| Closed Block assets |  |  |
| Fixed maturities, available-for-sale, at fair value | 38,696 | 37,584 |
| Other trading account assets, at fair value | 283 | 288 |
| Equity securities, available-for-sale, at fair value | 2,572 | 2,726 |
| Commercial mortgage and other loans | 9,437 | 9,770 |
| Policy loans | 4,660 | 4,790 |
| Other long-term investments | 3,020 | 2,921 |
| Short-term investments | 837 | 1,467 |
| Total investments | 59,505 | 59,546 |
| Cash and cash equivalents | 1,310 | 1,036 |
| Accrued investment income | 491 | 506 |
| Other Closed Block assets | 206 | 458 |
| Total Closed Block assets | 61,512 | 61,546 |
| Excess of reported Closed Block liabilities over Closed Block assets | 2,825 | 2,867 |
| Portion of above representing accumulated other comprehensive income: |  |  |
| Net unrealized investment gains (losses) | 2,990 | 2,800 |
| Allocated to policyholder dividend obligation | $(3,011)$ | $(2,815)$ |
| Future earnings to be recognized from Closed Block assets and Closed Block liabilities | \$ 2,804 | \$ 2,852 |

Information regarding the policyholder dividend obligation is as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Balance, January 1 | \$4,509 | \$ 6,612 |
| Impact from earnings allocable to policyholder dividend obligation | (48) | 137 |
| Change in net unrealized investment gains (losses) allocated to policyholder dividend obligation | 197 | $(2,240)$ |
| Balance, December 31 | \$4,658 | \$ 4,509 |

Closed Block revenues and benefits and expenses for the years ended December 31, are as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Revenues |  |  |  |
| Premiums | \$2,619 | \$2,668 | \$2,704 |
| Net investment income | 2,597 | 2,709 | 2,809 |
| Realized investment gains (losses), net | 433 | 834 | 1,164 |
| Other income (loss) | 36 | 23 | 34 |
| Total Closed Block revenues | 5,685 | 6,234 | 6,711 |
| Benefits and Expenses |  |  |  |
| Policyholders' benefits | 3,283 | 3,366 | 3,326 |
| Interest credited to policyholders' account balances | 132 | 135 | 136 |
| Dividends to policyholders | 1,941 | 2,130 | 2,635 |
| General and administrative expenses | 402 | 423 | 444 |
| Total Closed Block benefits and expenses | 5,758 | 6,054 | 6,541 |
| Closed Block revenues, net of Closed Block benefits and expenses, before income taxes and discontinued operations | (73) | 180 | 170 |
| Income tax expense (benefit) | (120) | 136 | 139 |
| Closed Block revenues, net of Closed Block benefits and expenses and income taxes, before discontinued operations | 47 | 44 | 31 |
| Income (loss) from discontinued operations, net of taxes | 0 | 0 | 1 |
| Closed Block revenues, net of Closed Block benefits and expenses, income taxes and discontinued operations | \$ 47 | \$ 44 | \$ 32 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 13. REINSURANCE

The Company participates in reinsurance with third parties primarily to provide additional capacity for future growth, limit the maximum net loss potential arising from large risks and acquire or dispose of businesses.

Effective April 1, 2015, the Company entered into an agreement with Union Hamilton Reinsurance, Ltd. ("Union Hamilton") an external counterparty, to reinsure approximately $50 \%$ of the Prudential Premier ${ }^{\circledR}$ Retirement Variable Annuity with Highest Daily Lifetime Income ("HDI") v.3.0 business, a guaranteed benefit feature. This reinsurance agreement covered most new HDI v.3.0 variable annuity business issued between April 1, 2015 and December 31, 2016 on a quota share basis, with Union Hamilton's cumulative quota share amounting to $\$ 2.9$ billion of new rider premiums as of December 31, 2016. Reinsurance on business subject to this agreement remains in force for the duration of the underlying annuity contracts. New sales subsequent to December 31, 2016 are not covered by this external reinsurance agreement. These guaranteed benefit features are accounted for as embedded derivatives.

On January 2, 2013, the Company acquired the Hartford Life Business through a reinsurance transaction. Under the agreement, the Company provided reinsurance for approximately 700,000 life insurance policies with net retained face amount in force of approximately $\$ 141$ billion. The Company acquired the general account business through a coinsurance arrangement and, for certain types of general account policies, a modified coinsurance arrangement. The Company acquired the separate account business through a modified coinsurance arrangement.

Since 2011, the Company has entered into several reinsurance agreements to assume pension liabilities in the United Kingdom. Under these arrangements, the Company assumes the longevity risk associated with the pension benefits of certain named beneficiaries. In 2014, the Company entered into a significant reinsurance transaction with a new United Kingdom counterparty. The account value associated with this transaction was $\$ 27$ billion.

In 2006, the Company acquired the variable annuity business of The Allstate Corporation ("Allstate") through a reinsurance transaction. The reinsurance arrangements with Allstate include a coinsurance arrangement associated with the general account liabilities assumed and a modified coinsurance arrangement associated with the separate account liabilities assumed. The reinsurance payable, which represents the Company's obligation under the modified coinsurance arrangement, is netted with the reinsurance receivable in the Consolidated Statements of Financial Position.

In 2004, the Company acquired the retirement business of CIGNA and subsequently entered into various reinsurance arrangements. The Company still has indemnity coinsurance and modified coinsurance without assumption arrangements in effect related to this acquisition.

For the domestic business, life and disability reinsurance is accomplished through various plans of reinsurance, primarily yearly renewable term, per person excess, excess of loss, and coinsurance. On policies sold since 2000, the Company has reinsured a significant portion of the individual life mortality risk. Placement of reinsurance is accomplished primarily on an automatic basis with some specific risks reinsured on a facultative basis. The Company has historically retained up to $\$ 30$ million per life, but reduced its retention limit to $\$ 20$ million per life in 2013. In addition, through December 31, 2014, the Company reinsured $73 \%$ of the Closed Block division with unaffiliated third parties through various modified coinsurance arrangements accounted for using the deposit method of accounting. Effective January 1, 2015, the external reinsurance arrangements related to the Closed Block division were recaptured.

The international business primarily uses reinsurance to obtain experience with respect to certain new product offerings and to a lesser extent, to manage risk and volatility as necessary.

Reinsurance ceded arrangements do not discharge the Company as the primary insurer. Ceded balances would represent a liability of the Company in the event the reinsurers were unable to meet their obligations to the Company under the terms of the reinsurance agreements. Reinsurance premiums, commissions, expense reimbursements, benefits and reserves related to reinsured long-duration contracts under coinsurance arrangements are accounted for over the life of the underlying reinsured contracts using assumptions consistent with those used to account for the underlying contracts. Coinsurance arrangements contrast with the Company's yearly renewable term arrangements, where only mortality risk is transferred to the reinsurer and premiums are paid to the reinsurer to reinsure that risk. The mortality risk that is reinsured under yearly renewable term arrangements represents the difference between the stated death benefits in the underlying reinsured contracts and the corresponding reserves or account value carried by the Company on those same contracts. The premiums paid to the reinsurer are based upon negotiated amounts, not on the actual premiums paid by the underlying contract holders to the Company. As yearly renewable term arrangements are usually entered into by the Company with the expectation that the contracts will be inforce for the lives of the underlying policies, they are considered to be long-duration reinsurance contracts. The cost of reinsurance related to short-duration reinsurance contracts is accounted for over the reinsurance contract period. The tables presented below exclude amounts pertaining to the Company's discontinued operations.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Reinsurance amounts included in the Consolidated Statements of Operations for premiums, policy charges and fee income and policyholders' benefits for the years ended December 31, were as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | in millions) |  |
| Direct premiums | \$30,654 | \$27,996 | \$29,666 |
| Reinsurance assumed | 2,073 | 2,147 | 1,134 |
| Reinsurance ceded | $(1,763)$ | $(1,622)$ | $(1,507)$ |
| Premiums | \$30,964 | \$28,521 | \$29,293 |
| Direct policy charges and fee income | \$ 5,031 | \$ 5,127 | \$ 5,026 |
| Reinsurance assumed | 1,243 | 1,179 | 1,425 |
| Reinsurance ceded | (368) | (334) | (272) |
| Policy charges and fee income | \$ 5,906 | \$ 5,972 | \$ 6,179 |
| Direct policyholders' benefits | \$32,957 | \$29,242 | \$31,012 |
| Reinsurance assumed | 3,110 | 3,107 | 2,732 |
| Reinsurance ceded | $(2,435)$ | $(1,722)$ | $(2,157)$ |
| Policyholders' benefits | \$33,632 | \$30,627 | \$31,587 |

Reinsurance recoverables at December 31, are as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Individual and group annuities(1) | \$ 658 | \$ 659 |
| Life insurance(2) | 3,388 | 2,885 |
| Other reinsurance | 165 | 160 |
| Total reinsurance recoverables | \$4,211 | \$3,704 |

(1) Primarily represents reinsurance recoverables established under the reinsurance arrangements associated with the acquisition of the retirement business of CIGNA. The Company has recorded reinsurance recoverables related to the acquisition of the retirement business of CIGNA of $\$ 656$ million and $\$ 650$ million at December 31, 2016 and 2015, respectively. Also included is $\$ 0$ million and $\$ 7$ million of reinsurance recoverables at December 31, 2016 and 2015, respectively, established under the reinsurance agreement with Union Hamilton Reinsurance, Ltd. related to the ceding of certain embedded derivative liabilities associated with the Company's guaranteed benefits.
(2) Includes $\$ 2,049$ million and $\$ 2,118$ million of reinsurance recoverables established at December 31, 2016 and 2015, respectively, under the reinsurance arrangements associated with the acquisition of the Hartford Life Business. The Company has also recorded reinsurance payables related to the Hartford Life Business acquisition of $\$ 1,205$ million and $\$ 1,305$ million at December 31, 2016 and 2015, respectively.

Excluding the reinsurance recoverable associated with the acquisition of the Hartford Life Business and the retirement business of CIGNA, four major reinsurance companies account for approximately $59 \%$ of the reinsurance recoverable at December 31, 2016. The Company periodically reviews the financial condition of its reinsurers, amounts recoverable therefrom, and unearned reinsurance premium, in order to minimize its exposure to loss from reinsurer insolvencies. If deemed necessary, the Company would secure collateral in the form of a trust, letter of credit, or funds withheld arrangement to ensure collectability; otherwise, an allowance for uncollectible reinsurance would be recorded. Under the Company's longevity reinsurance transactions, the Company has secured collateral from its counterparties to minimize counterparty default risk.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 14. SHORT-TERM AND LONG-TERM DEBT

## Short-term Debt

The table below presents the Company's short-term debt at December 31, for the years indicated as follows:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (\$ in millions) |  |
| Commercial paper: |  |  |
| Prudential Financial | \$ 65 | \$ 80 |
| Prudential Funding, LLC | 525 | 384 |
| Subtotal commercial paper | 590 | 464 |
| Current portion of long-term debt | 543 | 752 |
| Total short-term debt(1) | \$1,133 | \$1,216 |
| Supplemental short-term debt information: |  |  |
| Portion of commercial paper borrowings due overnight | \$ 292 | \$ 331 |
| Daily average commercial paper outstanding | \$1,020 | \$1,127 |
| Weighted average maturity of outstanding commercial paper, in days | 21 | 10 |
| Weighted average interest rate on outstanding short-term debt(2) | 0.43\% | 0.16\% |

(1) Includes Prudential Financial debt of $\$ 535$ million and $\$ 831$ million at December 31, 2016 and 2015, respectively.
(2) Excludes the current portion of long-term debt.

At December 31, 2016 and 2015, the Company was in compliance with all covenants related to the above debt.

## Commercial Paper

Prudential Financial has a commercial paper program with an authorized capacity of $\$ 3.0$ billion. Prudential Financial's commercial paper borrowings have generally been used to fund the working capital needs of Prudential Financial's subsidiaries and provide short-term liquidity at Prudential Financial.

Prudential Funding, LLC ("Prudential Funding"), a wholly-owned subsidiary of Prudential Insurance, has a commercial paper program, with an authorized capacity of $\$ 7.0$ billion. Prudential Funding commercial paper borrowings generally have served as an additional source of financing to meet the working capital needs of Prudential Insurance and its subsidiaries. Prudential Funding also lends to other subsidiaries of Prudential Financial up to limits agreed with the NJDOBI. Prudential Funding maintains a support agreement with Prudential Insurance whereby Prudential Insurance has agreed to maintain Prudential Funding's tangible net worth at a positive level. Additionally, Prudential Financial has issued a subordinated guarantee covering Prudential Funding's $\$ 7.0$ billion commercial paper program.

## Federal Home Loan Bank of New York

Prudential Insurance is a member of the FHLBNY. Membership allows Prudential Insurance access to the FHLBNY's financial services, including the ability to obtain collateralized loans and to issue collateralized funding agreements. Under applicable law, the funding agreements issued to the FHLBNY have priority claim status above debt holders of Prudential Insurance. FHLBNY borrowings and funding agreements are collateralized by qualifying mortgage-related assets or U.S. Treasury securities, the fair value of which must be maintained at certain specified levels relative to outstanding borrowings. FHLBNY membership requires Prudential Insurance to own member stock and borrowings require the purchase of activity-based stock in an amount equal to $4.5 \%$ of outstanding borrowings. Under FHLBNY guidelines, if any of Prudential Insurance's financial strength ratings decline below A/A2/A Stable by S\&P/Moody's/Fitch, respectively, and the FHLBNY does not receive written assurances from the NJDOBI regarding Prudential Insurance's solvency, new borrowings from the FHLBNY would be limited to a term of 90 days or less. Currently there are no restrictions on the term of borrowings from the FHLBNY. All FHLBNY stock purchased by Prudential Insurance is classified as restricted general account investments within "Other long-term investments," and the carrying value of these investments was $\$ 78$ million and $\$ 98$ million as of December 31, 2016 and 2015, respectively.

NJDOBI permits Prudential Insurance to pledge collateral to the FHLBNY in an amount of up to $5 \%$ of its prior year-end statutory net admitted assets, excluding separate account assets. Based on Prudential Insurance's statutory net admitted assets as of December 31, 2015, the $5 \%$ limitation equates to a maximum amount of pledged assets of $\$ 5.8$ billion and an estimated maximum borrowing capacity (after taking into account required collateralization levels) of approximately $\$ 5.0$ billion. Nevertheless, FHLBNY borrowings are subject to the FHLBNY's discretion and to the availability of qualifying assets at Prudential Insurance.

As of December 31, 2016, Prudential Insurance had pledged assets with a fair value of $\$ 1.2$ billion supporting outstanding funding agreements totaling $\$ 1.0$ billion, which are included in "Policyholders' account balances." The fair value of qualifying assets that were available to Prudential Insurance, but not pledged, amounted to $\$ 5.9$ billion as of December 31, 2016. Prudential Insurance had no advances outstanding under the FHLBNY facility as of December 31, 2016.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Federal Home Loan Bank of Boston

Prudential Retirement Insurance and Annuity Company ("PRIAC") is a member of the Federal Home Loan Bank of Boston ("FHLBB"). Membership allows PRIAC access to collateralized advances which will be classified in "Short-term debt" or "Long-term debt," depending on the maturity date of the obligation. PRIAC's membership in FHLBB requires the ownership of member stock and borrowings from FHLBB require the purchase of activity-based stock in an amount between $3.0 \%$ and $4.5 \%$ of outstanding borrowings, depending on the maturity date of the obligation. All FHLBB stock purchased by PRIAC is classified as restricted general account investments within "Other long-term investments," and the carrying value of these investments was $\$ 10$ million and $\$ 11$ million as of December 31, 2016 and 2015, respectively. As of December 31, 2016, PRIAC had no advances outstanding under the FHLBB facility.

Under Connecticut state insurance law, without the prior consent of the Connecticut Insurance Department, the amount of assets insurers may pledge to secure debt obligations is limited to the lesser of $5 \%$ of prior-year statutory admitted assets or $25 \%$ of prior-year statutory surplus, resulting in a maximum borrowing capacity for PRIAC under the FHLBB facility of approximately $\$ 245$ million as of December 31, 2016.

## Credit Facilities

As of December 31, 2016, the Company maintained syndicated, unsecured committed credit facilities as described below.

| Borrower | Original Term | $\underset{\text { Date }}{\text { Expiration }}$ | Capacity | Amount Outstanding |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (in millions) |  |
| Prudential Financial and Prudential Funding | 5 years | Apr 2020 | \$ 4,000 | \$0 |
| Prudential Holdings of Japan, Inc. | 3 years | Sep 2019 | $¥ 100,000$ | $¥ 0$ |

The $\$ 4.0$ billion five-year facility contains customary representations and warranties, covenants and events of default and borrowings are not contingent on the borrowers' credit ratings nor subject to material adverse change clauses. Borrowings under this facility are conditioned on the continued satisfaction of customary financial covenants, including Prudential Financial's maintenance of consolidated net worth of at least $\$ 18.985$ billion, which is calculated as U.S. GAAP equity, excluding AOCI, equity of noncontrolling interests and equity attributable to the Closed Block. The Company expects that it may borrow under the $\$ 4.0$ billion five-year facility from time to time to fund its working capital needs. In addition, amounts under this credit facility may be drawn in the form of standby letters of credit that can be used to meet the Company's operating needs.

The $¥ 100$ billion three-year facility was entered into by Prudential Holdings of Japan, Inc. in September 2016. This facility also contains customary representations and warranties, covenants, and events of default and borrowings are not contingent on the borrower's credit ratings nor subject to material adverse change clauses. The $¥ 100$ billion three-year facility also contains a two year term-out option.

Borrowings under each of these credit facilities may be used for general corporate purposes. As of December 31, 2016, the Company was in compliance with the covenants under each of these credit facilities.

In addition to the above credit facilities, the Company had access to $\$ 838$ million of certain other lines of credit at December 31, 2016, of which $\$ 765$ million was for the sole use of certain real estate separate accounts. The separate account facilities include loan-to-value ratio requirements and other financial covenants, and recourse on obligations under these facilities is limited to the assets of the applicable separate account. At December 31, 2016, $\$ 462$ million of these credit facilities were used. The Company also has access to uncommitted lines of credit from financial institutions.

## Put Option Agreement for Senior Debt Issuance

In November 2013, Prudential Financial entered into a ten-year put option agreement with a Delaware trust upon the completion of the sale of $\$ 1.5$ billion of trust securities by that Delaware trust in a Rule 144A private placement. The trust invested the proceeds from the sale of the trust securities in a portfolio of principal and interest strips of U.S. Treasury securities. The put option agreement provides Prudential Financial the right to sell to the trust at any time up to $\$ 1.5$ billion of $4.419 \%$ senior notes due November 2023 and receive in exchange a corresponding amount of the principal and interest strips of U.S. Treasury securities held by the trust. In return, the Company agreed to pay a semi-annual put premium to the trust at a rate of $1.777 \%$ per annum applied to the unexercised portion of the put option. The put option agreement with the trust provides Prudential Financial with a source of liquid assets.

The put option described above will be exercised automatically in full upon the Company's failure to make certain payments to the trust, such as paying the put option premium or reimbursing the trust for its expenses, if the Company's failure to pay is not cured within 30 days, and upon an event involving its bankruptcy. The Company is also required to exercise the put option if its consolidated stockholders' equity, calculated in accordance with U.S. GAAP but excluding AOCI, falls below $\$ 7.0$ billion, subject to adjustment in certain cases. The Company has a one-time right to unwind a prior voluntary exercise of the put option by repurchasing all of the senior notes then held by the trust in exchange for principal and interest strips of U.S. Treasury securities. Finally, any of the $4.419 \%$ senior notes that Prudential Financial issues may be redeemed prior to their maturity at par or, if greater, a make-whole price, following a voluntary exercise in full of the put option.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Long-term Debt

The table below presents the Company's long-term debt at December 31, for the years indicated as follows:

|  | $\begin{gathered} \text { Maturity } \\ \text { Dates } \\ \hline \end{gathered}$ | Rate(2) | December 31, |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2016 | 2015(1) |
|  |  |  | (\$ in millions) |  |
| Fixed-rate notes: |  |  |  |  |
| Surplus notes | 2019-2025 | 5.36\%-8.30\% | \$ 840 | \$ 841 |
| Surplus notes subject to set-off arrangements | 2021-2033 | 3.52\%-5.26\% | 4,403 | 3,850 |
| Senior notes | 2017-2045 | 2.30\%-11.31\% | 9,236 | 10,208 |
| Mortgage debt(3) | 2019-2024 | 1.72\%-3.74\% | 177 | 134 |
| Floating-rate notes: |  |  |  |  |
| Surplus notes | 2052 | 1.58\%-2.04\% | 499 | 500 |
| Surplus notes subject to set-off arrangements | 2024 | 1.73\%-2.25\% | 1,456 | 1,050 |
| U.S. dollar-denominated senior notes | 2017-2020 | 1.14\%-4.39\% | 1,008 | 1,608 |
| Foreign currency denominated senior notes | (4) | 1.07\%-1.24\% | 55 | 51 |
| Mortgage debt(5) | 2017-2025 | 0.65\%-2.40\% | 409 | 430 |
| Junior subordinated notes | 2042-2068 | 5.20\%-8.88\% | 5,817 | 5,811 |
| Subtotal |  |  | 23,900 | 24,483 |
| Less: assets under set-off arrangements(6) |  |  | 5,859 | 4,889 |
| Total long-term debt(7) |  |  | \$18,041 | \$19,594 |

(1) Prior period has been revised to conform to current period presentation due to the adoption of ASU 2015-03 regarding debt issuance costs. For more information, see Note 2 to the Consolidated Financial Statements.
(2) Ranges of interest rates are for the year ended December 31, 2016.
(3) Includes $\$ 82$ million and $\$ 38$ million of debt denominated in foreign currency at December 31, 2016 and 2015, respectively.
(4) Perpetual debt that has no stated maturity.
(5) Includes $\$ 221$ million and $\$ 212$ million of debt denominated in foreign currency at December 31, 2016 and 2015, respectively.
(6) Assets under set-off arrangements represent a reduction in the amount of surplus notes included in long-term debt, resulting from an arrangement where valid rights of set-off exist and it is the intent of both parties to settle on a net basis under legally enforceable arrangements. These assets include available-for-sale securities that are valued at market.
(7) Includes Prudential Financial debt of $\$ 15,389$ million and $\$ 16,354$ million at December 31, 2016 and 2015, respectively.

At December 31, 2016 and 2015, the Company was in compliance with all debt covenants related to the borrowings in the table above.
The following table presents the contractual maturities of the Company's long-term debt as of December 31, 2016:

|  | Calendar Year |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2019 | 2020 | 2021 | 2022 and thereafter |  |
|  |  |  |  | illions) |  |  |
| Long-term debt | \$1,330 | \$1,684 | \$1,253 | \$554 | \$13,220 | \$18,041 |

## Surplus Notes

As of December 31, 2016, Prudential Insurance had $\$ 840$ million of fixed-rate surplus notes outstanding. These notes are subordinated to other Prudential Insurance borrowings and policyholder obligations, and the payment of interest and principal may only be made with the prior approval of the NJDOBI. The NJDOBI could prohibit the payment of the interest and principal on the surplus notes if certain statutory capital requirements are not met. At December 31, 2016 and 2015, the Company met these statutory capital requirements.

Prudential Insurance's fixed-rate surplus notes include $\$ 500$ million of exchangeable surplus notes issued in a private placement in 2009 with an interest rate of $5.36 \%$ per annum and due September 2019. The surplus notes became exchangeable at the option of the holder, in whole but not in part, for shares of Prudential Financial Common Stock beginning as of September 18, 2014. The initial exchange rate for the surplus notes was 10.1235 shares of Common Stock per each $\$ 1,000$ principal amount of surplus notes, which represented an initial exchange price per share of Common Stock of $\$ 98.78$; however, the exchange rate is subject to customary antidilution adjustments. The exchange rate is also subject to a make-whole decrease in the event of an exchange prior to maturity (except upon a fundamental business combination or a continuing payment default), that will result in a reduction in the number of shares issued upon exchange (per $\$ 1,000$ principal amount of surplus notes) determined by dividing a prescribed cash reduction value (which will decline over the life of the surplus notes, from $\$ 102.62$ for an exercise on September 18, 2014, to zero for an exercise at maturity) by the price of the Common Stock at the time of exchange. In addition, the exchange rate is subject to a customary make-whole increase in connection with an exchange of the surplus notes upon a fundamental business combination where $10 \%$ or more of the consideration in that business combination consists of cash, other property or securities that are not listed on a U.S. national securities exchange. These exchangeable surplus notes are not redeemable by Prudential Insurance prior to maturity, except in connection with a fundamental business combination

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involving Prudential Financial, in which case the surplus notes will be redeemable by Prudential Insurance, subject to the noteholders' right to exchange the surplus notes instead, at par or, if greater, a make-whole redemption price.

From 2011 through 2013, a captive reinsurance subsidiary of Prudential Insurance entered into agreements providing for the issuance and sale of up to $\$ 2.0$ billion of ten-year fixed-rate surplus notes. Under the agreements, the captive receives in exchange for the surplus notes one or more credit-linked notes issued by a special-purpose subsidiary of the Company in an aggregate principal amount equal to the surplus notes issued. The captive holds the credit-linked notes as assets supporting non-economic reserves required to be held by the Company's domestic insurance subsidiaries under Regulation XXX in connection with the reinsurance of term life insurance policies through the captive. Regulation XXX requires statutory reserves for term and universal life insurance policies with long-term premium guarantees to be consistent with the statutory reserves required for other individual life policies with similar guarantees. Many market participants believe that these levels of reserves are excessive relative to the levels reasonably required to maintain solvency for moderately adverse experience. The difference between the statutory reserve and the amount the Company considers necessary to maintain solvency for moderately adverse experience is considered the non-economic portion of the statutory reserve.

The principal amount of the outstanding credit-linked notes is redeemable by the captive in cash upon the occurrence of, and in an amount necessary to remedy, a specified liquidity stress event affecting the captive. Under the agreements, external counterparties have agreed to fund any such payment under the credit-linked notes in return for a fee. Prudential Financial has agreed to make capital contributions to the captive to reimburse it for investment losses in excess of specified amounts and has agreed to reimburse the external counterparties for any payments under the credit-linked notes that are funded by those counterparties. As of December 31, 2016, an aggregate of $\$ 1.75$ billion of surplus notes were outstanding under these agreements and no such payments under the credit-linked notes have been required.

In December 2013, a captive reinsurance subsidiary entered into a twenty-year financing facility with external counterparties providing for the issuance and sale of a surplus note for the financing of non-economic reserves required under Guideline AXXX. The current financing capacity available under the facility is $\$ 3.5$ billion. In December 2015, the facility was amended to increase the maximum potential size of the facility to $\$ 4.5$ billion. Similar to the agreements described above, the captive receives in exchange for the surplus note one or more credit-linked notes issued by a special-purpose affiliate in an aggregate principal amount equal to the surplus note. As above, the principal amount of the outstanding credit-linked notes is redeemable by the captive in cash upon the occurrence of, and in an amount necessary to remedy, a specified liquidity stress event, and the external counterparties have agreed to fund any such payment. Prudential Financial has agreed to reimburse the captive for investment losses in excess of specified amounts; however, Prudential Financial has no other reimbursement obligations to the external counterparties under this facility. As of December 31, 2016, an aggregate of $\$ 2.65$ billion of surplus notes were outstanding under the facility and no credit-linked note payments have been required.

In December 2014, a captive reinsurance subsidiary entered into a ten-year financing facility with certain unaffiliated financial institutions, pursuant to which the captive agreed to issue and sell a surplus note in an aggregate principal amount of up to $\$ 1.75$ billion in return for an equal principal amount of credit-linked notes issued by a special-purpose affiliate. The term of the financing facility may be extended, at the captive's option, by up to five years. The captive holds the credit-linked notes as assets supporting non-economic reserves required to be held by the Company's domestic insurance subsidiaries under Regulation XXX in connection with the reinsurance of term life insurance policies through the captive. The principal amount of the outstanding credit-linked notes is redeemable by the captive in cash upon the occurrence of, and in an amount necessary to remedy, a specified liquidity stress event affecting the captive. Under the agreements, external counterparties have agreed to fund any such payment under the credit-linked notes in return for a fee. Prudential Financial has agreed to make capital contributions to the captive to reimburse it for investment losses in excess of specified amounts. As of December 31, 2016, an aggregate of $\$ 1.46$ billion of surplus notes were outstanding under the facility and no credit-linked note payments have been required.

A captive reinsurance subsidiary maintains a financing facility with unaffiliated financial institutions, pursuant to which the captive has outstanding $\$ 2.7$ billion in principal amount of surplus notes and received in return an equal principal amount of credit-linked notes issued by two special-purpose affiliates. One of the special-purpose affiliates also has outstanding $\$ 500$ million of senior notes held by one of the unaffiliated financial institutions, following the redemption of $\$ 600$ million of senior notes in November 2016. The remaining term of the financing is eighteen years. The captive holds the credit-linked notes as assets supporting non-economic reserves required to be held by the Company's domestic insurance subsidiaries under Regulation XXX in connection with the reinsurance through the captive of term life insurance policies. The captive can redeem the credit-linked notes in cash upon the occurrence of, and in an amount necessary to remedy, a liquidity stress event affecting the captive. The unaffiliated financial institutions have agreed to fund any such credit-linked notes payments in an amount of up to $\$ 1.9$ billion, in return for the receipt of fees. The remaining $\$ 800$ million of obligations of the specialpurpose affiliates to make payments under the credit-linked notes are supported by collateral held by those affiliates. Prudential Financial has agreed to make capital contributions to the captive and to the special-purpose affiliates to reimburse them for investment losses in excess of specified amounts. Prudential Financial has also agreed to reimburse one of the unaffiliated financial institutions for any payments under the credit-linked notes funded by it in an amount of up to $\$ 1$ billion and for any payments due but otherwise unpaid under the $\$ 500$ million of senior notes issued by the special-purpose affiliates.

Under each of the above transactions for the captive reinsurance subsidiaries, because valid rights of set-off exist, interest and principal payments on the surplus notes and on the credit-linked notes are settled on a net basis, and the surplus notes are reflected in the Company's total consolidated borrowings on a net basis.

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Another captive reinsurance subsidiary has $\$ 500$ million of outstanding principal on surplus notes that were issued in 2007 with unaffiliated institutions to finance non-economic reserves required under Guideline AXXX. Prudential Financial has agreed to maintain the capital of this captive at or above a prescribed minimum level and has entered into arrangements (which are accounted for as derivative instruments) that require it to make certain payments in the event of deterioration in the value of the surplus notes. As of December 31, 2016 and 2015, there were no collateral postings made under these derivative instruments.

The surplus notes for the captive reinsurance subsidiaries described above are subordinated to policyholder obligations, and the payment of principal on the surplus notes may only be made with prior approval of the Arizona Department of Insurance. The payment of interest on the surplus notes has been approved by the Arizona Department of Insurance, subject to its ability to withdraw that approval.

On February 18, 2015, Prudential Legacy Insurance Company of New Jersey ("PLIC") entered into a twenty-year financing facility with certain unaffiliated financial institutions and a special-purpose company affiliate, pursuant to which PLIC may, at its option and subject to the satisfaction of customary conditions, issue and sell to the affiliate up to $\$ 4.0$ billion in aggregate principal amount of surplus notes, in return for an equal principal amount of credit-linked notes. Upon issuance, PLIC would hold any credit-linked notes as assets to finance future statutory surplus needs within PLIC. As of December 31, 2016, there were no surplus notes outstanding under the facility.

## Senior Notes

Medium-Term Notes. Prudential Financial maintains a medium-term notes program under its shelf registration statement with an authorized issuance capacity of $\$ 20.0$ billion. As of December 31, 2016, the outstanding balance of medium-term notes under this program was $\$ 9.6$ billion, a decrease of $\$ 1.3$ billion from December 31, 2015, due to maturities of $\$ 750$ million and the repurchase of $\$ 500$ million of medium-term notes through a tender offer. The repurchase included a prepayment premium and fees totaling $\$ 36$ million which were recorded to interest expense.

Retail Medium-Term Notes. Prudential Financial also maintains a retail medium-term notes program, including the InterNotes ${ }^{\circledR}$ program, under its shelf registration statement with an authorized issuance capacity of $\$ 5.0$ billion. As of December 31, 2016, the outstanding balance of retail notes was $\$ 461$ million.

The weighted average interest rate on outstanding senior notes issued under these programs, including the effect of interest rate hedging activity, was $5.54 \%$ and $5.03 \%$ for the years ended December 31, 2016 and 2015, respectively, excluding the effect of debt issued to consolidated subsidiaries.

Funding Agreement Notes Issuance Program. The Company maintains a FANIP in which statutory trusts issue medium-term notes and commercial paper secured by funding agreements issued to the trusts by Prudential Insurance. These obligations are included in "Policyholders' account balances" and not included in the foregoing table. See Note 10 for further discussion of these obligations.

Mortgage Debt. As of December 31, 2016, the Company's subsidiaries had mortgage debt of $\$ 659$ million that has recourse only to real estate property held for investment by those subsidiaries. This represents an increase of $\$ 95$ million from December 31, 2015, primarily due to new borrowings in 2016 of $\$ 113$ million (including foreign exchange fluctuations) offset by foreign exchange fluctuations of $\$ 14$ million on debt outstanding as of 2015.

## Junior Subordinated Notes

Prudential Financial's junior subordinated notes outstanding are considered hybrid securities that receive enhanced equity treatment from the rating agencies. Junior subordinated notes outstanding, along with their key terms, are as follows:

| Issue Date | Principal Amount | Initial Interest Rate | Investor Type | Optional Redemption Date(1) | Interest Rate Subsequent to Optional Redemption Date | Scheduled Maturity Date | $\begin{gathered} \text { Final } \\ \text { Maturity Date } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$ in millions) |  |  |  |  |  |  |
| June 2008 | \$ 600 | 8.88\% | Institutional | 6/15/2018 | LIBOR + 5.00\% | 6/15/2038 | 6/15/2068 |
| August 2012 | \$1,000 | 5.88\% | Institutional | 9/15/2022 | LIBOR + 4.18\% | n /a | 9/15/2042 |
| November 2012 | \$1,500 | 5.63\% | Institutional | 6/15/2023 | LIBOR + 3.92\% | n/a | 6/15/2043 |
| December 2012 | \$ 575 | 5.75\% | Retail | 12/4/2017 | 5.75\% | n/a | 12/15/2052 |
| March 2013 | \$ 710 | 5.70\% | Retail | 3/15/2018 | 5.70\% | n/a | 3/15/2053 |
| March 2013 | \$ 500 | 5.20\% | Institutional | 3/15/2024 | LIBOR + 3.04\% | n/a | 3/15/2044 |
| May 2015 | \$1,000 | 5.38\% | Institutional | 5/15/2025 | LIBOR + 3.03\% | n/a | 3/15/2045 |

[^11]Prudential Financial has the right to defer interest payments on these notes for specified periods, typically 5-10 years without resulting in a default, during which time interest will be compounded. On or after the optional redemption dates, Prudential Financial may redeem the notes at par plus accrued and unpaid interest. Prior to those optional redemption dates, redemptions generally are subject to a makewhole price; however, the Company may redeem the notes prior to these dates at par upon the occurrence of certain events, such as, for the

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notes issued in 2012 and later, a future change in the regulatory capital treatment of the notes with respect to the Company. In connection with the issuance of the $8.88 \%$ notes, Prudential Financial entered into a replacement capital covenant for the benefit of the holders of its $5.90 \%$ senior notes due March 2036. Under this covenant, the Company agreed not to redeem or repurchase the $8.88 \%$ notes prior to June 2038 unless it has received proceeds from the issuance of specified replacement capital securities.

Limited Recourse Notes. In 2014, Prudential Financial entered into financing transactions pursuant to which it issued $\$ 500$ million of limited recourse notes and, in return, obtained $\$ 500$ million of asset-backed notes issued by a designated series of a Delaware master trust. The asset-backed notes mature from 2019 through 2023; however, the maturity date of a portion of the notes may be extended by the Company through 2024, subject to conditions. The asset-backed notes were ultimately contributed to PRIAC, an insurance subsidiary, to finance statutory surplus, and PRIAC, in turn, paid cash dividends totaling $\$ 500$ million to its parent, Prudential Insurance.

The master trust's payment obligations under each of the asset-backed notes are secured by corresponding payment obligations of a third-party financial institution and a portfolio of specified assets that have an aggregate value at least equal to the principal amount of the applicable asset-backed note. The principal amount of each asset-backed note is payable to PRIAC in cash at any time upon demand by PRIAC or, if not earlier paid, at maturity. Each of the limited recourse notes obligates Prudential Financial to reimburse the applicable third-party financial institution for any principal payments received on the corresponding asset-backed note, but there is no obligation to reimburse any portion of a principal payment that is needed by PRIAC to pay then current claims to its policyholders. Each limited recourse note bears interest at a rate equal to the rate on the corresponding asset-backed note, plus an amount representing fees payable to the applicable third-party financial institution. As of December 31, 2016, no principal payments have been received or are currently due on the asset-backed notes and, as a result, there was no payment obligation under the limited recourse notes. Accordingly, the notes are not reflected in the Company's Consolidated Financial Statements as of December 31, 2016.

## Interest Expense

In order to modify exposure to interest rate and currency exchange rate movements, the Company utilizes derivative instruments, primarily interest rate swaps, in conjunction with some of its debt issues. The impact of these derivative instruments are not reflected in the rates presented in the tables above. For those derivative instruments that qualify for hedge accounting treatment, interest expense increased by $\$ 5$ million, $\$ 7$ million and $\$ 22$ million for the years ended December 31, 2016, 2015 and 2014, respectively. See Note 21 for additional information on the Company's use of derivative instruments.

Interest expense for short-term and long-term debt was $\$ 1,324$ million, $\$ 1,328$ million and $\$ 1,934$ million for the years ended December 31, 2016, 2015 and 2014, respectively. This includes interest expense of $\$ 11$ million for each of the years ended December 31, 2016, 2015 and 2014, reported in "Net investment income." The interest expense for the year ended December 31, 2016 includes a prepayment premium and fees totaling $\$ 36$ million on debt repurchased through a tender offer.

## 15. EQUITY

On the date of demutualization, Prudential Financial completed an initial public offering of its Common Stock at an initial public offering price of $\$ 27.50$ per share. The shares of Common Stock issued were in addition to shares of Common Stock the Company distributed to policyholders as part of the demutualization. The Common Stock is traded on the New York Stock Exchange under the symbol "PRU". Through December 31, 2014, the Common Stock reflected the performance of the Company's former Financial Services Businesses. As a result of the Class B Repurchase, beginning in 2015, the Common Stock reflects the consolidated performance of Prudential Financial.

Also on the date of demutualization, Prudential Financial completed the sale, through a private placement, of 2.0 million shares of Class B Stock at a price of $\$ 87.50$ per share. The Class B Stock was a separate class of common stock not traded publicly, which reflected the performance of the Company's former Closed Block Business. As part of the Class B Repurchase, Prudential Financial repurchased and canceled all of the 2.0 million shares of the Class B Stock.

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The changes in the number of shares of Common Stock issued, held in treasury and outstanding, are as follows for the periods indicated:

|  | Common Stock |  |  |
| :---: | :---: | :---: | :---: |
|  | Issued Held In <br> Treasury |  | Outstanding |
|  | (in millions) |  |  |
| Balance, December 31, 2013 | 660.1 | 199.0 | 461.1 |
| Common Stock issued | 0.0 | 0.0 | 0.0 |
| Common Stock acquired | 0.0 | 11.6 | (11.6) |
| Stock-based compensation programs(1) | 0.0 | (5.3) | 5.3 |
| Balance, December 31, 2014 | 660.1 | 205.3 | 454.8 |
| Common Stock issued | 0.0 | 0.0 | 0.0 |
| Common Stock acquired | 0.0 | 12.1 | (12.1) |
| Stock-based compensation programs(1) | 0.0 | (4.4) | 4.4 |
| Balance, December 31, 2015 | 660.1 | 213.0 | 447.1 |
| Common Stock issued | 0.0 | 0.0 | 0.0 |
| Common Stock acquired | 0.0 | 25.1 | (25.1) |
| Stock-based compensation programs(1) | 0.0 | (7.6) | 7.6 |
| Balance, December 31, 2016 | 660.1 | 230.5 | 429.6 |

(1) Represents net shares issued from treasury pursuant to the Company's stock-based compensation programs.

In the event of a liquidation, dissolution or winding-up of the Company, holders of Common Stock would be entitled to receive a proportionate share of the net assets of the Company that remain after paying all liabilities and the liquidation preferences of any preferred stock.

## Common Stock Held in Treasury

Common Stock held in treasury is accounted for at average cost. Gains resulting from the reissuance of "Common Stock held in treasury" are credited to "Additional paid-in capital." Losses resulting from the reissuance of "Common Stock held in treasury" are charged first to "Additional paid-in capital" to the extent the Company has previously recorded gains on treasury share transactions, then to "Retained earnings."

In June 2014, Prudential Financial's Board of Directors authorized the Company to repurchase at management's discretion up to $\$ 1.0$ billion of its outstanding Common Stock from July 1, 2014 through June 30, 2015. Under this authorization, 11.7 million shares of the Company's Common Stock were repurchased at a total cost of $\$ 1.0$ billion, of which 6.0 million shares were repurchased in the first six months of 2015 at a total cost of $\$ 500$ million.

In June 2015, Prudential Financial's Board of Directors authorized the Company to repurchase at management's discretion up to $\$ 1.0$ billion of its outstanding Common Stock from July 1, 2015 through June 30, 2016. As of December 31, 2015, 6.1 million shares of the Company's Common Stock were repurchased under this authorization at a total cost of $\$ 500$ million.

In December 2015, Prudential Financial's Board of Directors authorized the Company to repurchase at management's discretion up to $\$ 1.5$ billion of its outstanding Common Stock during the period from January 1, 2016 through December 31, 2016. Effective January 1, 2016, this authorization superseded the Company's previous $\$ 1.0$ billion share repurchase authorization that covered the period from July 1, 2015 through June 30, 2016. In August 2016, the Board of Directors authorized a $\$ 500$ million increase to the authorization for calendar year 2016. As a result, the Company's aggregate share repurchase authorization for the full year 2016 was $\$ 2.0$ billion. As of December 31, 2016, 25.1 million shares of the Company's Common Stock were repurchased under this authorization at a total cost of $\$ 2.0$ billion.

In December 2016, Prudential Financial's Board of Directors authorized the Company to repurchase at management's discretion up to $\$ 1.25$ billion of its outstanding Common Stock from January 1, 2017 through December 31, 2017.

The timing and amount of share repurchases are determined by management based upon market conditions and other considerations, and repurchases may be effected in the open market, through derivative, accelerated repurchase and other negotiated transactions and through prearranged trading plans complying with Rule 10b5-1(c) under the Securities Exchange Act of 1934. Numerous factors could affect the timing and amount of any future repurchases under the share repurchase authorization, including increased capital needs of the Company due to changes in regulatory capital requirements, opportunities for growth and acquisitions, and the effect of adverse market conditions on the segments.

## PRUDENTIAL FINANCIAL, INC.

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## Class B Stock

On January 2, 2015, pursuant to a Share Repurchase Agreement entered into on December 1, 2014, between the Company and the holders of the Class B Stock, the Company repurchased and canceled all of the shares of the Class B Stock for an aggregate cash purchase price of $\$ 651$ million, resulting in the elimination of the Class B Stock held in treasury, a $\$ 484$ million decrease in "Retained earnings" and a $\$ 167$ million decrease in "Additional paid-in capital."

In accordance with the terms of the Share Repurchase Agreement, the holders of the Class B Stock subsequently exercised their right to dispute the calculation of the purchase price. This dispute was resolved during the first quarter of 2016, resulting in an increase to the cash purchase price of $\$ 119$ million, bringing the total aggregate purchase price to $\$ 770$ million. The increase to the cash purchase price resulted in a corresponding decrease in "Retained earnings."

## Preferred Stock

As of December 31, 2016, 2015 and 2014, the Company had no preferred stock outstanding.

## Dividends

The declaration and payment of dividends on the Common Stock is limited by New Jersey corporate law, pursuant to which Prudential Financial is prohibited from paying a Common Stock dividend if, after giving effect to that dividend, either (a) the Company would be unable to pay its debts as they become due in the usual course of its business or (b) the Company's total assets would be less than its liabilities. In addition, the terms of the Company's outstanding junior subordinated debt include a "dividend stopper" provision that restricts the payment of dividends on the Common Stock if interest payments are not made on the junior subordinated debt. Further, as a Designated Financial Company under the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), Prudential Financial is expected to be subject to stricter requirements and limitations regarding capital, leverage and liquidity. Prudential Financial's compliance with these and other requirements under Dodd-Frank could limit its ability to pay Common Stock dividends in the future.

As of December 31, 2016, the Company's U.S. GAAP retained earnings were $\$ 21,946$ million. Other than the above limitations, this amount is free of restrictions for the payment of Common Stock dividends; however, Common Stock dividends will be dependent upon financial conditions, results of operations, cash needs, future prospects and other factors, including cash available to Prudential Financial, the parent holding company. The principal sources of funds available to Prudential Financial are dividends and returns of capital from its subsidiaries, repayments of operating loans from its subsidiaries and cash and short-term investments. The primary uses of funds at Prudential Financial include servicing its debt, operating expenses, capital contributions and loans to subsidiaries, the payment of declared shareholder dividends and repurchases of outstanding shares of Common Stock if executed under Board authority. As of December 31, 2016, Prudential Financial had highly liquid assets consisting of cash, short-term investments and U.S. Treasury fixed maturities of $\$ 4,553$ million, excluding amounts held in an intercompany liquidity account.

Future cash available at Prudential Financial to support the payment of future Common Stock dividends is dependent on the receipt of dividends or other funds from its subsidiaries, the majority of which are subject to comprehensive regulation, including limitations on their payment of dividends and other transfers of funds, which are discussed below.

With respect to Prudential Insurance, the Company's primary domestic insurance subsidiary, New Jersey insurance law provides that, except in the case of extraordinary dividends (as described below), all dividends or other distributions paid by Prudential Insurance may be paid only from unassigned surplus, as determined pursuant to statutory accounting principles, less cumulative unrealized investment gains and losses and revaluation of assets as of the prior calendar year-end. As of December 31, 2016, Prudential Insurance's unassigned surplus was $\$ 10,176$ million, and it recorded applicable adjustments for cumulative unrealized investment gains of $\$ 256$ million. Prudential Insurance must give prior notification to the NJDOBI of its intent to pay any such dividend or distribution. Also, if any dividend, together with other dividends or distributions made within the preceding twelve months, exceeds the greater of (i) $10 \%$ of Prudential Insurance's statutory surplus as of the preceding December 31 ( $\$ 11,290$ million as of December 31, 2016) or (ii) its statutory net gain from operations excluding realized investment gains and losses for the twelve month period ending on the preceding December 31 ( $\$ 5,720$ million for the year ended December 31, 2016), the dividend is considered to be an "extraordinary dividend" and requires the prior approval of the NJDOBI. Under New Jersey insurance law, Prudential Insurance is permitted to pay an ordinary dividend of \$5,720 million in 2017 without prior approval of the NJDOBI. Of the $\$ 5,720$ million, $\$ 2,702$ million is permitted to be paid prior to April 2017 without prior approval of the NJDOBI. Of the remaining $\$ 3,018$ million, $\$ 2,118$ million is permitted to be paid after April 2017, and $\$ 900$ million is permitted to be paid after June 2017, without prior approval of the NJDOBI.

The laws regulating dividends of the states where the Company's other domestic insurance subsidiaries are domiciled are similar, but not identical, to New Jersey's. In Arizona, if any dividend, together with other dividends or distributions made within the preceding twelve months, exceeds the lesser of (i) $10 \%$ of statutory surplus as of December 31 of the preceding year or (ii) the statutory net gain from operations of the preceding calendar year, the dividend is considered to be an "extraordinary dividend" and requires prior approval of the Arizona Department of Insurance. Under Arizona insurance law, Prudential Annuities Life Assurance Corporation ("PALAC"), an Arizona-domiciled insurer that is a subsidiary of Prudential Financial, is not permitted to pay a dividend in 2017 without prior notification to the Arizona Department of Insurance, as PALAC reported a statutory net loss from operations in 2016.

The Company's international insurance operations are subject to dividend restrictions from the regulatory authorities in the jurisdictions in which they operate. With respect to The Prudential Life Insurance Company Ltd. ("Prudential of Japan") and Gibraltar Life,

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the Company's most significant international insurance subsidiaries, both of which are domiciled in Japan, Japan insurance law provides that common stock dividends may be paid in an amount of up to $83 \%$ of prior fiscal year statutory after-tax earnings, after certain reserving thresholds are met, including providing for policyholder dividends. If statutory retained earnings exceed $100 \%$ of statutory paid-in capital, $100 \%$ of prior year statutory after-tax earnings may be paid, after reserving thresholds are met. Dividends in excess of these amounts and other forms of capital distribution require the prior approval of the Japan Financial Services Agency ("FSA"). Additionally, Prudential of Japan and Gibraltar Life must give prior notification to the FSA of their intent to pay any dividend or distribution. In addition to paying common stock dividends, Prudential of Japan and Gibraltar Life may return capital to Prudential Financial through other means, such as the repayment of subordinated debt or preferred stock obligations held by Prudential Financial or other affiliates. During 2016, Prudential Financial received a total of $\$ 446$ million from Prudential International Insurance Holdings, the domestic parent of the International Insurance subsidiaries, which is attributable to Prudential Holdings of Japan, Inc. ("PHJ"), the parent of the Company's Japanese operations. During 2016, PHJ received a total of $¥ 98.3$ billion, or $\$ 842$ million at year-end 2016 foreign currency exchange rates, from its subsidiaries, of which a portion was sent to Prudential Financial, as noted above and $\$ 450$ million was retained at PHJ but remains available to be paid as a dividend to Prudential Financial. The current regulatory fiscal year end for both Prudential of Japan and Gibraltar Life is March 31, 2017, after which time the common stock dividend amount permitted to be paid without prior approval from the FSA can be determined.

In addition, although prior regulatory approval may not be required by law for the payment of dividends up to the limitations described above, in practice, the Company would typically discuss any dividend payments with the applicable regulatory authority prior to payment. Additionally, the payment of dividends by the Company's subsidiaries is subject to declaration by their Board of Directors and may be affected by market conditions and other factors.

## Statutory Net Income, Capital and Surplus

The Company's domestic insurance subsidiaries are required to prepare statutory financial statements in accordance with statutory accounting practices prescribed or permitted by the insurance department of the state of domicile. Statutory accounting practices primarily differ from U.S. GAAP by charging policy acquisition costs to expense as incurred, establishing future policy benefit liabilities using different actuarial assumptions as well as valuing investments and certain assets and accounting for deferred taxes on a different basis. Statutory net income (loss) of Prudential Insurance amounted to $\$ 5,214$ million, $\$ 5,253$ million and $\$ 901$ million for the years ended December 31, 2016, 2015 and 2014, respectively. Statutory capital and surplus of Prudential Insurance amounted to $\$ 11,290$ million and $\$ 11,543$ million at December 31, 2016 and 2015, respectively. Statutory net income (loss) of PALAC amounted to $\$(2,018)$ million, $\$ 340$ million and $\$ 393$ million for the years ended December 31, 2016, 2015 and 2014, respectively. Statutory capital and surplus of PALAC amounted to $\$ 5,718$ million and $\$ 482$ million at December 31, 2016 and 2015, respectively.

The risk-based capital ("RBC") ratio is a primary measure by which the Company and its insurance regulators evaluate the capital adequacy of Prudential Insurance and the Company's other domestic insurance subsidiaries. RBC is determined by NAIC-prescribed formulas that consider, among other things, risks related to the type and quality of the invested assets, insurance-related risks associated with an insurer's products and liabilities, interest rate risks and general business risks. If a subsidiary's Total Adjusted Capital ("TAC"), as calculated in a manner prescribed by the NAIC, falls below the Company Action Level RBC, corrective action is required. As of December 31, 2016, Prudential Insurance and PALAC both had TAC levels in excess of 4.0 times the regulatory required minimums that would require corrective action.

The Company's international insurance subsidiaries prepare financial statements in accordance with local regulatory requirements. These statutory accounting practices differ from U.S. GAAP primarily by charging policy acquisition costs to expense as incurred and establishing future policy benefit liabilities using different actuarial assumptions, as well as valuing investments and certain assets and accounting for deferred taxes on a different basis.

The FSA utilizes a solvency margin ratio to evaluate the capital adequacy of Japanese insurance companies. The solvency margin ratio considers the level of solvency margin capital to a solvency margin risk amount, which is calculated in a similar manner to RBC. As of December 31, 2016, Prudential of Japan and Gibraltar Life both had solvency margin capital in excess of 3.5 times the regulatory required minimums that would require corrective action.

All of the Company's domestic and international insurance subsidiaries have capital and surplus levels that exceed their respective regulatory minimum requirements, and none utilized prescribed or permitted practices that vary materially from the practices prescribed by the NAIC or equivalent regulatory bodies for results reported as of December 31, 2016 and 2015, respectively, or for the years ended December 31, 2016, 2015 and 2014, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Accumulated Other Comprehensive Income (Loss)

The balance of and changes in each component of "Accumulated other comprehensive income (loss) attributable to Prudential Financial, Inc." for the years ended December 31, are as follows:

|  |  | mulated Other Co Attributable to Pr | prehensive Income ential Financial, Inc |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Foreign Currency Translation Adjustment | Net Unrealized Investment Gains (Losses)(1) | Pension and Postretirement Unrecognized Net Periodic Benefit (Cost) | Total Accumulated Other Comprehensive Income (Loss) |
|  |  | (in m | llions) |  |
| Balance, December 31, 2013 | \$ (113) | \$10,344 | \$ $(1,550)$ | \$ 8,681 |
| Change in OCI before reclassifications | $(1,066)$ | 15,490 | $(1,134)$ | 13,290 |
| Amounts reclassified from AOCI | (3) | $(1,760)$ | 91 | $(1,672)$ |
| Income tax benefit (expense) | 207 | $(4,823)$ | 367 | $(4,249)$ |
| Balance, December 31, 2014 | (975) | 19,251 | $(2,226)$ | 16,050 |
| Change in OCI before reclassifications | (245) | $(3,161)$ | (457) | $(3,863)$ |
| Amounts reclassified from AOCI | 17 | $(2,325)$ | 193 | $(2,115)$ |
| Income tax benefit (expense) | 116 | 2,008 | 89 | 2,213 |
| Balance, December 31, 2015 | $(1,087)$ | 15,773 | $(2,401)$ | 12,285 |
| Change in OCI before reclassifications | 199 | 5,176 | (468) | 4,907 |
| Amounts reclassified from AOCI | 13 | $(1,493)$ | 214 | $(1,266)$ |
| Income tax benefit (expense) | (98) | $(1,285)$ | 78 | $(1,305)$ |
| Balance, December 31, 2016 | \$ (973) | \$18,171 | \$(2,577) | \$14,621 |

(1) Includes cash flow hedges of $\$ 1,316$ million, $\$ 1,165$ million and $\$ 206$ million as of December 31, 2016, 2015, and 2014, respectively.

## Reclassifications out of Accumulated Other Comprehensive Income (Loss)

|  | Years | ded Dece | er 31, | Affected line item in Consolidated |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 | Statements of Operations |
|  |  | n millions |  |  |
| Amounts reclassified from $\mathrm{AOCI}(1)(2)$ : |  |  |  |  |
| Foreign currency translation adjustment: |  |  |  |  |
| Foreign currency translation adjustment | \$ (13) | \$ (8) | \$ 3 | Realized investment gains (losses), net |
| Foreign currency translation adjustment | 0 | (9) | 0 | Other income |
| Total foreign currency translation adjustment | (13) | (17) | 3 |  |
| Net unrealized investment gains (losses): |  |  |  |  |
| Cash flow hedges-Interest Rate | (5) | (7) | (60) | (3) |
| Cash flow hedges-Currency/Interest rate | 456 | 247 | 114 | (3) |
| Net unrealized investment gains (losses) on availab securities | 1,042 | 2,085 | 1,706 |  |
| Total net unrealized investment gains (losses) | 1,493 | 2,325 | 1,760 | (4) |
| Amortization of defined benefit items: |  |  |  |  |
| Prior service cost | 8 | 13 | 20 | (5) |
| Actuarial gain (loss) | (222) | (206) | (111) | (5) |
| Total amortization of defined benefit items | (214) | (193) | (91) |  |
| Total reclassifications for the period | \$1,266 | \$2,115 | \$1,672 |  |

(1) All amounts are shown before tax.
(2) Positive amounts indicate gains/benefits reclassified out of AOCI. Negative amounts indicate losses/costs reclassified out of AOCI.
(3) See Note 21 for additional information on cash flow hedges.
(4) See table below for additional information on unrealized investment gains (losses), including the impact on deferred policy acquisition and other costs, future policy benefits and policyholders' dividends.
(5) See Note 18 for information on employee benefit plans.

## Net Unrealized Investment Gains (Losses)

Net unrealized investment gains (losses) on securities classified as available-for-sale and certain other long-term investments and other assets are included in the Company's Consolidated Statements of Financial Position as a component of

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

AOCI. Changes in these amounts include reclassification adjustments to exclude from "Other comprehensive income (loss)" those items that are included as part of "Net income" for a period that had been part of "Other comprehensive income (loss)" in earlier periods. The amounts for the periods indicated below, split between amounts related to fixed maturity securities on which an OTTI loss has been recognized, and all other net unrealized investment gains (losses), are as follows:

## Net Unrealized Investment Gains (Losses) on Fixed Maturity Securities on which an OTTI loss has been recognized

|  | Net Unrealized Gains (Losses) on Investments | $\begin{aligned} & \text { DAC, DSI, } \\ & \text { and VOBA } \\ & \hline \end{aligned}$ | Future Policy Benefits and Policyholders' Account Balances | Policyholders' Dividends | Deferred Income Tax (Liability) Benefit | Accumulated <br> Other <br> Comprehensive <br> Income (Loss) <br> Related To Net <br> Unrealized <br> Investment <br> Gains (Losses) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (in | ons) |  |  |
| Balance, December 31, 2013 | \$110 | \$ (5) | \$ 4 | \$ 64 | \$ (60) | \$113 |
| Net investment gains (losses) on investments arising during the period | 196 |  |  |  | (69) | 127 |
| Reclassification adjustment for (gains) losses included in net income | 47 |  |  |  | (16) | 31 |
| Reclassification adjustment for OTTI losses excluded from net income(1) | (4) |  |  |  | 1 | (3) |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | (1) |  |  | 0 | (1) |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances . . . . |  |  | (1) |  | 0 | (1) |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | (96) | 34 | (62) |
| Balance, December 31, 2014 | 349 | (6) | 3 | (32) | (110) | 204 |
| Net investment gains (losses) on investments arising during the period | (3) |  |  |  | 1 | (2) |
| Reclassification adjustment for (gains) losses included in net income | (97) |  |  |  | 35 | (62) |
| Reclassification adjustment for OTTI losses excluded from net income(1) | (15) |  |  |  | 5 | (10) |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | 12 |  |  | (4) | 8 |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances . . . . |  |  | 11 |  | (4) | 7 |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | 1 | 0 | 1 |
| Balance, December 31, 2015 | 234 | 6 | 14 | (31) | (77) | 146 |
| Net investment gains (losses) on investments arising during the period | 93 |  |  |  | (31) | 62 |
| Reclassification adjustment for (gains) losses included in net income | 1 |  |  |  | 0 | 1 |
| Reclassification adjustment for OTTI losses excluded from net income(1) | (16) |  |  |  | 5 | (11) |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | (11) |  |  | 3 | (8) |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances . . . . |  |  | (20) |  | (3) | (23) |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | (16) | 6 | (10) |
| Balance, December 31, 2016 | \$312 | \$ (5) | \$ (6) | \$(47) | \$ (97) | \$157 |

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## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## All Other Net Unrealized Investment Gains (Losses) in AOCI

|  | Net Unrealized Gains (Losses) on Investments(1) | DAC, DSI, and VOBA | Future Policy Benefits and Policyholders' Account Balances | Policyholders' Dividends | Deferred Income Tax (Liability) Benefit | $\begin{gathered} \text { Accumulated } \\ \text { Other } \\ \text { Comprehensive } \\ \text { Income (Loss) } \\ \text { Related To Net } \\ \text { Unrealized } \\ \text { Investment } \\ \text { Gains (Losses) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (in m |  |  |  |
| Balance, December 31, 2013 | \$20,494 | \$ (719) | \$ (679) | \$ $(3,694)$ | \$(5,171) | \$10,231 |
| Net investment gains (losses) on investments arising during the period | 18,073 |  |  |  | $(6,337)$ | 11,736 |
| Reclassification adjustment for (gains) losses included in net income | $(1,807)$ |  |  |  | 632 | $(1,175)$ |
| Reclassification adjustment for OTTI losses excluded from net income(2) | 4 |  |  |  | (1) | 3 |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | (736) |  |  | 254 | (482) |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances |  |  | (603) |  | 211 | (392) |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | $(1,342)$ | 468 | (874) |
| Balance, December 31, 2014 | 36,764 | $(1,455)$ | $(1,282)$ | $(5,036)$ | $(9,944)$ | 19,047 |
| Net investment gains (losses) on investments arising during the period | $(6,311)$ |  |  |  | 2,268 | $(4,043)$ |
| Reclassification adjustment for (gains) losses included in net income | $(2,228)$ |  |  |  | 801 | $(1,427)$ |
| Reclassification adjustment for OTTI losses excluded from net income(2) | 15 |  |  |  | (5) | 10 |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | 695 |  |  | (240) | 455 |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances |  |  | 200 |  | (67) | 133 |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | 2,234 | (782) | 1,452 |
| Balance, December 31, 2015 | 28,240 | (760) | $(1,082)$ | $(2,802)$ | $(7,969)$ | 15,627 |
| Net investment gains (losses) on investments arising during the period | 5,658 |  |  |  | $(1,910)$ | 3,748 |
| Reclassification adjustment for (gains) losses included in net income | $(1,494)$ |  |  |  | 504 | (990) |
| Reclassification adjustment for OTTI losses excluded from net income(2) | 16 |  |  |  | (5) | 11 |
| Impact of net unrealized investment (gains) losses on DAC, DSI, and VOBA |  | (296) |  |  | 93 | (203) |
| Impact of net unrealized investment (gains) losses on future policy benefits and policyholders' account balances |  |  | (54) |  | (9) | (63) |
| Impact of net unrealized investment (gains) losses on policyholders' dividends |  |  |  | (178) | 62 | (116) |
| Balance, December 31, 2016 | \$32,420 | \$(1,056) | \$(1,136) | \$(2,980) | \$(9,234) | \$18,014 |

(1) Includes cash flow hedges. See Note 21 for information on cash flow hedges.
(2) Represents "transfers out" related to the portion of OTTI losses recognized during the period that were not recognized in earnings for securities with no prior OTTI loss.

## 16. EARNINGS PER SHARE

From demutualization through December 31, 2014, the Company had two separate classes of common stock. The Common Stock reflected the performance of the Company's former Financial Services Businesses and the Class B Stock reflected the performance of the Company's former Closed Block Business. Earnings per share were calculated separately for each of these two classes of common stock and included a direct equity adjustment to modify the earnings available to each of the classes of common stock for the difference between the allocation of general and administrative expenses to each of the businesses and the cash flows between the businesses related to these

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

expenses. Accordingly, earnings per share of Common Stock presented below for the year ended December 31, 2014, reflect earnings attributable to the former Financial Services Businesses.

As discussed in Note 1, on January 2, 2015, Prudential Financial repurchased and canceled all of the 2.0 million shares of the Class B Stock. Accordingly, earnings per share of Common Stock presented below for the years ended December 31, 2015 and 2016, reflect the consolidated earnings of Prudential Financial. In addition, the Class B Repurchase resulted in the elimination of the separation of the former Financial Services Businesses and Closed Block Business. As a result, there were no direct equity adjustments recorded for the years ended December 31, 2016 and 2015.

Earnings per share of the Class B Stock for the year ended December 31, 2014 is not presented herein as it is not meaningful due to the Class B Repurchase.

A reconciliation of the numerators and denominators of the basic and diluted per share computations of Common Stock based on the consolidated earnings of Prudential Financial for the years ended December 31, 2016 and 2015, is as follows:

|  | 2016 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income | Weighted Average Shares | Per Share Amount | Income | Weighted Average Shares | Per Share Amount |
|  | (in millions, except per share amounts) |  |  |  |  |  |
| Basic earnings per share |  |  |  |  |  |  |
| Income (loss) from continuing operations | \$4,419 |  |  | \$5,712 |  |  |
| Less: Income (loss) attributable to noncontrolling interests | 51 |  |  | 70 |  |  |
| Less: Dividends and undistributed earnings allocated to participating unvested sharebased payment awards | 50 |  |  | 55 |  |  |
| Income (loss) from continuing operations attributable to Prudential Financial available to holders of Common Stock | \$4,318 | 438.2 | \$9.85 | \$5,587 | 451.7 | \$12.37 |
| Effect of dilutive securities and compensation programs |  |  |  |  |  |  |
| Add: Dividends and undistributed earnings allocated to participating unvested share-based payment awards-Basic | \$ 50 |  |  | \$ 55 |  |  |
| Less: Dividends and undistributed earnings allocated to participating unvested sharebased payment awards-Diluted | 49 |  |  | 54 |  |  |
| Stock options |  | 1.8 |  |  | 2.3 |  |
| Deferred and long-term compensation programs |  | 0.9 |  |  | 0.9 |  |
| Exchangeable Surplus Notes | 17 | 5.7 |  | 17 | 5.5 |  |
| Diluted earnings per share |  |  |  |  |  |  |
| Income (loss) from continuing operations attributable to Prudential Financial available to holders of Common Stock | $\underline{\$ 4,336}$ | $\stackrel{446.6}{\underline{~}}$ | \$9.71 | $\stackrel{\text { 5,605 }}{ }$ | $\stackrel{460.4}{\underline{~}}$ | $\stackrel{\text { \$12.17 }}{ }$ |

A reconciliation of the numerators and denominators of the basic and diluted per share computations of Common Stock based on earnings attributable to the former Financial Services Businesses for the year ended December 31, 2014, is as follows:

|  |  | 2014 |  |
| :---: | :---: | :---: | :---: |
|  | Income | Weighted <br> Average <br> Shares | Per Share Amount |
|  | (in milli | ns, excep amounts) | per share |
| Basic earnings per share |  |  |  |
| Income (loss) from continuing operations attributable to the Financial Services Businesses | \$1,579 |  |  |
| Direct equity adjustment | (27) |  |  |
| Less: Income (loss) attributable to noncontrolling interests | 57 |  |  |
| Less: Dividends and undistributed earnings allocated to participating unvested share-based payment awards | 14 |  |  |
| Income (loss) from continuing operations attributable to the Financial Services Businesses available to holders of Common |  |  |  |
| Stock after direct equity adjustment | $\underline{\text { \$1,481 }}$ | 458.5 | \$3.23 |
| Effect of dilutive securities and compensation programs |  |  |  |
| Add: Dividends and undistributed earnings allocated to participating unvested share-based payment awards-Basic . | \$ 14 |  |  |
| Less: Dividends and undistributed earnings allocated to participating unvested share-based payment awards-Diluted | 14 |  |  |
| Stock options |  | 3.0 |  |
| Deferred and long-term compensation programs |  | 0.8 |  |
| Exchangeable Surplus Notes | 17 | 5.4 |  |
| Diluted earnings per share |  |  |  |
| Income (loss) from continuing operations attributable to the Financial Services Businesses available to holders of Common |  |  |  |
| Stock after direct equity adjustment | \$1,498 | $\underline{467.7}$ | $\underline{\$ 3.20}$ |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Unvested share-based payment awards that contain nonforfeitable rights to dividends are participating securities and included in the computation of earnings per share pursuant to the two-class method. Under this method, earnings attributable to Prudential Financial are allocated between Common Stock and the participating awards, as if the awards were a second class of stock. During periods of income from continuing operations available to holders of Common Stock, after direct equity adjustment as applicable, the calculation of earnings per share excludes the income attributable to participating securities in the numerator and the dilutive impact of these securities from the denominator. In the event of loss from continuing operations available to holders of Common Stock, after direct equity adjustment as applicable, undistributed earnings are not allocated to participating securities and the denominator excludes the dilutive impact of these securities as they do not share in the losses of the Company. Undistributed earnings allocated to participating unvested share-based payment awards for the years ended December 31, 2016, 2015 and 2014 were based on 5.1 million, 4.4 million and 4.3 million of such awards, respectively, weighted for the period they were outstanding.

Stock options and shares related to deferred and long-term compensation programs that are considered antidilutive are excluded from the computation of dilutive earnings per share. Stock options are considered antidilutive based on application of the treasury stock method or in the event of loss from continuing operations available to holders of Common Stock, after direct equity adjustment as applicable. Shares related to deferred and long-term compensation programs are considered antidilutive in the event of loss from continuing operations available to holders of Common Stock, after direct equity adjustment as applicable. For the years ended December 31, the number of stock options and shares related to deferred and long-term compensation programs that were considered antidilutive and were excluded from the computation of diluted earnings per share, weighted for the portion of the period they were outstanding, are as follows:

|  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shares | Exercise Price Per Share | $\underline{\text { Shares }}$ | Exercise Price Per Share | Shares | Exercise Price Per Share |
|  | (in millions, except per share amounts, based on weighted average) |  |  |  |  |  |
| Antidilutive stock options based on application of the treasury stock method | 2.7 | \$83.97 | 2.4 | \$87.97 | 1.9 | \$90.30 |
| Antidilutive stock options due to loss from continuing operations available to holders of Common Stock after direct equity adjustment | 0.0 |  | 0.0 |  | 0.0 |  |
| Antidilutive shares due to loss from continuing operations available to holders of Common Stock after direct equity adjustment | 0.0 |  | $\underline{0.0}$ |  | $\underline{0.0}$ |  |
| Total antidilutive stock options and shares | 2.7 |  | 2.4 |  | 1.9 |  |

In September 2009, the Company issued $\$ 500$ million of surplus notes with an interest rate of $5.36 \%$ per annum which are exchangeable at the option of the note holders for shares of Common Stock. The initial exchange rate for the surplus notes was 10.1235 shares of Common Stock per each $\$ 1,000$ principal amount of surplus notes, which represents an initial exchange price per share of Common Stock of $\$ 98.78$; however, the exchange rate is subject to customary anti-dilution adjustments. In calculating diluted earnings per share under the if-converted method, the potential shares that would be issued assuming a hypothetical exchange, weighted for the period the notes are outstanding, are added to the denominator, and interest expense, net of tax, is added to the numerator, if the overall effect is dilutive.

## 17. SHARE-BASED PAYMENTS

## Omnibus Incentive Plan

Prudential Financial, Inc.'s omnibus incentive plans provide stock-based awards including stock options, stock appreciation rights, restricted stock shares, restricted stock units, stock settled performance shares, and cash settled performance units. Dividend equivalents are generally provided on restricted stock shares and restricted stock units outstanding as of the record date. Dividend equivalents are generally accrued on target performance shares and units outstanding as of the record date. These dividend equivalents are paid only on the shares and units released up to a maximum of the target number of shares and units awarded. Generally, the requisite service period is the vesting period. There were 26,157,173 authorized shares available for grant under the 2016 Omnibus Plan as of December 31, 2016.

## Compensation Costs

Compensation cost for employee stock options is based on the fair values estimated on the grant date, using the approach and assumptions described below. Compensation cost for restricted stock units, performance shares and performance units granted to employees is measured by the share price of the underlying Common Stock at the date of grant.

The fair value of each stock option award is estimated using a binomial option pricing model on the date of grant for stock options issued to employees. The weighted average grant date assumptions used in the binomial option valuation model are as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
| Expected volatility | 38.36\% | 34.67\% | 35.52\% |
| Expected dividend yield | 3.92\% | 3.00\% | 2.70\% |
| Expected term | 5.61 years | 5.57 years | 5.63 years |
| Risk-free interest rate | 1.25\% | 1.61\% | 1.74\% |

## PRUDENTIAL FINANCIAL, INC.

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Expected volatilities are based on historical volatility of the Company's Common Stock and implied volatilities from traded options on the Company's Common Stock. The Company uses historical data and expectations of future exercise patterns to estimate option exercises and employee terminations within the valuation model. The expected term of options granted represents the period of time that options granted are expected to be outstanding. The risk-free rate for periods associated with the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

The following chart summarizes the compensation cost recognized and the related income tax benefit for stock options, restricted stock units, performance shares and performance units for the years ended December 31:

|  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Compensation Cost Recognized | Income Tax Benefit | Total Compensation Cost Recognized | Income Tax Benefit | Total Compensation Cost Recognized | Income Tax Benefit |
|  | (in millions) |  |  |  |  |  |
| Employee stock options | \$ 19 | \$ 7 | \$ 21 | \$ 8 | \$ 25 | \$ 9 |
| Employee restricted stock units | 126 | 47 | 111 | 42 | 95 | 34 |
| Employee performance shares and performance units | 57 | 21 | 32 | 12 | 46 | 17 |
| Total | \$202 | \$75 | \$164 | \$62 | \$166 | \$60 |

Compensation costs related to stock-based compensation plans capitalized in deferred acquisition costs for the years ended December 31, 2016, 2015 and 2014 were de minimis.

## Stock Options

Each stock option granted has an exercise price no less than the fair market value of the Company's Common Stock on the date of grant and has a maximum term of 10 years. Generally, one third of the option grant vests in each of the first three years.

A summary of the status of the Company's stock option grants is as follows:

|  | Employee Stock Options |  |
| :---: | :---: | :---: |
|  | Shares | Weighted Average Exercise Price |
| Outstanding at December 31, 2015 | 10,926,146 | \$66.18 |
| Granted | 1,219,714 | 63.73 |
| Exercised | $(4,986,622)$ | 68.03 |
| Forfeited | $(49,299)$ | 73.24 |
| Expired | $(371,137)$ | 80.48 |
| Outstanding at December 31, 2016 | 6,738,802 | \$63.53 |
| Vested and expected to vest at December 31, 2016 | 6,693,811 | \$63.51 |
| Exercisable at December 31, 2016 | 4,720,572 | \$60.66 |

The weighted average grant date fair value of employee stock options granted during the years ended December 31, 2016, 2015 and 2014 was $\$ 14.81, \$ 18.45$ and $\$ 21.65$, respectively.

The total intrinsic value (i.e., market price of the stock less the option exercise price) of employee stock options exercised during the years ended December 31, 2016, 2015 and 2014 was $\$ 120$ million, $\$ 49$ million, and $\$ 97$ million, respectively.

The weighted average remaining contractual term and the aggregate intrinsic value of stock options outstanding, vested and expected to vest and exercisable as of December 31, 2016 is as follows:

|  | December | 1, 2016 |
| :---: | :---: | :---: |
|  | Employee Sto | Options |
|  | Weighted Average Remaining Contractual Term | Aggregate Intrinsic Value |
|  | (in years) | (in millions) |
| Outstanding | 5.64 | \$273 |
| Vested and expected to vest . | 5.62 | \$271 |
| Exercisable . | 4.50 | \$205 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Restricted Stock Units, Performance Share Awards and Performance Unit Awards

A restricted stock unit is an unfunded, unsecured right to receive a share of the Company's Common Stock at the end of a specified period of time, which is subject to forfeiture and transfer restrictions. Generally, the restrictions will lapse on the third anniversary of the date of grant. Performance shares and performance units are awards denominated in the Company's Common Stock. The number of units is determined over the performance period, and may be adjusted based on the satisfaction of certain performance goals for the Company. Performance share awards are payable in the Company's Common Stock. Performance unit awards are payable in cash.

A summary of the Company's restricted stock units and performance shares and performance unit awards is as follows:

|  | Restricted <br> Stock <br> Units | Weighted Average Grant Date Fair Value | Performance Share and Performance Unit Awards(1) | Weighted Average Grant Date Fair Value |
| :---: | :---: | :---: | :---: | :---: |
| Restricted at December 31, 2015(2) | 4,354,286 | \$73.50 | 1,390,497 | \$ 81.41 |
| Granted(2) | 2,187,653 | 64.12 | 694,501 | 104.06 |
| Forfeited | $(110,815)$ | 72.13 | $(41,676)$ | 76.73 |
| Performance adjustment(3) |  |  | 188,838 | 63.59 |
| Released | (1,451,417) | 58.54 | $(568,487)$ | 63.71 |
| Restricted at December 31, 2016(2) | 4,979,707 | \$73.77 | 1,663,673 | \$104.06 |

(1) Performance share and performance unit awards reflect the target units awarded, reduced for forfeitures and releases to date. The actual number of units to be awarded at the end of each performance period will range between $0 \%$ and $125 \%$ of the target number of units granted, based upon a measure of the reported performance for the Company relative to stated goals.
(2) For performance share and performance unit awards, the grant date is the same as the date the grant vests. The features of the grant are such that a mutual understanding of the key terms and conditions of the award between the employee and employer have not been reached until the grant is vested. Consequently, the weighted average grant date fair value as of December 31, 2016 and December 31, 2015 is the closing stock price of Prudential Financial's common stock on those dates.
(3) Represents the difference between the target units granted and the actual units awarded based upon the attainment of performance goals for the Company.

The fair market value of restricted stock units, performance shares and performance units released for the years ended December 31, 2016, 2015 and 2014 was $\$ 128$ million, $\$ 162$ million and $\$ 145$ million, respectively.

The weighted average grant date fair value for restricted stock units granted during the years ended December 31, 2016, 2015 and 2014 was $\$ 64.12, \$ 78.40$ and $\$ 84.56$, respectively. The weighted average grant date fair value for performance shares and performance units granted during the years ended December 31, 2016, 2015 and 2014 was $\$ 104.06, \$ 81.41$ and $\$ 90.46$, respectively.

The number of restricted stock units, performance shares and performance units expected to vest at December 31, 2016 was 5,994,809.

## Unrecognized Compensation Cost

Unrecognized compensation cost for stock options as of December 31, 2016 was $\$ 4$ million with a weighted average recognition period of 1.70 years. Unrecognized compensation cost for restricted stock units, performance shares and performance units as of December 31, 2016 was $\$ 113$ million with a weighted average recognition period of 1.69 years.

## Tax Benefits Realized

The tax benefit realized for exercises of stock options during the years ended December 31, 2016, 2015 and 2014 was $\$ 41$ million, $\$ 20$ million and $\$ 35$ million, respectively.

The tax benefit realized upon vesting of restricted stock units, performance shares and performance units for the years ended December 31, 2016, 2015 and 2014 was $\$ 46$ million, $\$ 58$ million and $\$ 51$ million, respectively.

## Settlement of Awards

The Company's policy is to issue shares from Common Stock held in treasury upon exercise of stock options, the release of restricted stock units and performance shares. The Company uses cash to settle performance units. The amount of cash used to settle performance units during the years ended December, 31, 2016, 2015 and 2014 was $\$ 18$ million, $\$ 21$ million and $\$ 15$ million, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 18. EMPLOYEE BENEFIT PLANS

## Pension and Other Postretirement Plans

The Company has funded and non-funded non-contributory defined benefit pension plans, which cover substantially all of its employees. For some employees, benefits are based on final average earnings and length of service, while benefits for other employees are based on an account balance that takes into consideration age, service and earnings during their career.

The Company provides certain health care and life insurance benefits for its retired employees, their beneficiaries and covered dependents ("other postretirement benefits"). The health care plan is contributory; the life insurance plan is non-contributory. Substantially all of the Company's U.S. employees may become eligible to receive other postretirement benefits if they retire after age 55 with at least 10 years of service or under certain circumstances after age 50 with at least 20 years of continuous service.

Prepaid benefits costs and accrued benefit liabilities are included in "Other assets" and "Other liabilities," respectively, in the Company's Consolidated Statements of Financial Position. The status of these plans as of December 31, 2016 and 2015 is summarized below:

|  | Pension Benefits |  | Other Postretirement Benefits |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2016 | 2015 |
|  |  |  | millions) |  |
| Change in benefit obligation |  |  |  |  |
| Benefit obligation at the beginning of period | \$(12,221) | \$(12,545) | \$ 2,159 ) | \$ 2,233$)$ |
| Service cost | (253) | (244) | (19) | (20) |
| Interest cost | (498) | (469) | (91) | (86) |
| Plan participants' contributions | 0 | 0 | (31) | (29) |
| Medicare Part D subsidy receipts | 0 | 0 | (10) | (12) |
| Amendments | (3) | 0 | 0 | (2) |
| Actuarial gains (losses), net | (602) | 335 | 46 | 43 |
| Settlements | 24 | 22 | 0 | 0 |
| Special termination benefits | (2) | (4) | 0 | 0 |
| Benefits paid | 681 | 632 | 181 | 176 |
| Foreign currency changes and other | (43) | 52 | (1) | 4 |
| Benefit obligation at end of period | \$(12,917) | \$(12,221) | \$(2,084) | \$(2,159) |
| Change in plan assets |  |  |  |  |
| Fair value of plan assets at beginning of period | \$ 12,541 | \$ 13,028 | \$ 1,584 | \$ 1,717 |
| Actual return on plan assets | 883 | 35 | 82 | 9 |
| Employer contributions | 187 | 162 | 15 | 5 |
| Plan participants' contributions | 0 | 0 | 31 | 29 |
| Disbursement for settlements | (24) | (22) | 0 | 0 |
| Benefits paid | (681) | (632) | (181) | (176) |
| Foreign currency changes and other | (45) | (30) | 0 | 0 |
| Fair value of plan assets at end of period. | \$ 12,861 | \$ 12,541 | \$ 1,531 | \$ 1,584 |
| Funded status at end of period | $\stackrel{\text { \$ (56) }}{ }$ | \$ 320 | $\stackrel{\text { \$ (553) }}{\underline{-}}$ | \$ (575) |
| Amounts recognized in the Statements of Financial Position |  |  |  |  |
| Prepaid benefit cost | \$ 2,538 | \$ 2,687 | \$ 0 | \$ 0 |
| Accrued benefit liability | $(2,594)$ | $(2,367)$ | (553) | (575) |
| Net amount recognized | \$ (56) | \$ 320 | \$ (553) | \$ (575) |
| Items recorded in "Accumulated other comprehensive income (loss)" not yet recognized as a component of net periodic (benefit) cost: |  |  |  |  |
| Transition obligation | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| Prior service cost | (25) | (33) | 1 | (1) |
| Net actuarial loss | 3,481 | 3,173 | 557 | 621 |
| Net amount not recognized | \$ 3,456 | \$ 3,140 | \$ 558 | \$ 620 |
| Accumulated benefit obligation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | \$(12,300) | \$(11,607) | \$(2,084) | \$ 2,159 ) |

In addition to the plan assets above, the Company in 2007 established an irrevocable trust, commonly referred to as a "rabbi trust," for the purpose of holding assets of the Company to be used to satisfy its obligations with respect to certain non-qualified retirement plans ( $\$ 1,227$ million and $\$ 1,175$ million benefit obligation at December 31, 2016 and 2015, respectively). Assets held in the rabbi trust are available to the general creditors of the Company in the event of insolvency or bankruptcy. The Company may from time to time in its discretion make contributions to the trust to fund accrued benefits payable to participants in one or more of the plans, and, in the case of a change in control of the Company, as defined in the trust agreement, the Company will be required to make contributions to the trust to fund the accrued benefits, vested and unvested, payable on a pretax basis to participants in the plans. The Company did not make any discretionary payments to the trust in 2016 and made a discretionary payment of $\$ 95$ million in 2015. As of December 31, 2016 and 2015, the assets in the trust had a carrying value of $\$ 829$ million and $\$ 722$ million, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The Company also maintains a separate rabbi trust for the purpose of holding assets of the Company to be used to satisfy its obligations with respect to certain other non-qualified retirement plans ( $\$ 81$ million and $\$ 78$ million benefit obligation at December 31, 2016 and 2015, respectively), as well as certain cash-based deferred compensation arrangements. As of December 31, 2016 and 2015, the assets in the trust had a carrying value of $\$ 115$ million and $\$ 118$ million, respectively.

Pension benefits for foreign plans comprised $14 \%$ and $13 \%$ of the ending benefit obligation for 2016 and 2015, respectively. Foreign pension plans comprised $5 \%$ of the ending fair value of plan assets for both 2016 and 2015. There are no material foreign postretirement plans.

## Information for pension plans with a projected benefit obligation in excess of plan assets



## Information for pension plans with an accumulated benefit obligation in excess of plan assets

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in mi | lions) |
| Accumulated benefit obligation | \$2,426 | \$2,154 |
| Fair value of plan assets | \$ | \$ |

There were no purchases of annuity contracts in 2016 and 2015 from Prudential Insurance. The approximate future annual benefit payment payable by Prudential Insurance for all annuity contracts was $\$ 19$ million and $\$ 20$ million as of December 31, 2016 and 2015, respectively.

## Components of Net Periodic Benefit Cost

The Company uses market related value to determine components of net periodic (benefit) cost. Market related value recognizes certain changes in fair value of plan assets over a period of five years. Changes in the fair value of U.S. equities, international equities, real estate and other assets are recognized over a five year period. However, changes in the fair value for fixed maturity assets (including shortterm investments) are recognized immediately for the purposes of market related value.

Net periodic (benefit) cost included in "General and administrative expenses" in the Company's Consolidated Statements of Operations for the years ended December 31, includes the following components:

|  | Pension Benefits |  |  | Other Postretirement Benefits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |  |  |  |
| Service cost | \$ 253 | \$ 244 | \$ 234 | \$ 19 | \$ 20 | \$ 17 |
| Interest cost | 498 | 469 | 481 | 91 | 86 | 96 |
| Expected return on plan assets | (754) | (775) | (712) | (105) | (115) | (116) |
| Amortization of transition obligation | 0 | 0 | 0 | 0 | 0 | 0 |
| Amortization of prior service cost | (6) | (8) | (10) | (2) | (5) | (10) |
| Amortization of actuarial (gain) loss, net | 181 | 168 | 86 | 41 | 38 | 25 |
| Settlements | 7 | 5 | 10 | 0 | 0 | 0 |
| Special termination benefits(1) | 2 | 4 | 4 | 0 | 0 | 0 |
| Net periodic (benefit) cost | \$ 181 | \$ 107 |  |  | \$ 24 |  |

(1) Certain employees were provided special termination benefits under non-qualified plans in the form of unreduced early retirement benefits as a result of their involuntary termination.

## Changes in Accumulated Other Comprehensive Income

The benefit obligation is based upon actuarial assumptions such as discount, termination, retirement, mortality and salary growth rates. Changes at year-end in these actuarial assumptions, along with experience changes based on updated participant census data are deferred in AOCI. Plan assets generate actuarial gains and losses when actual returns on plan assets differ from expected returns on plan assets, and these differences are also deferred in AOCI. The cumulative deferred gain (loss) within AOCI is amortized into earnings if it exceeds $10 \%$ of the greater of the benefit obligation or plan assets at the beginning of the year, and the amortization period is based upon the actuarially calculated expected future years of service for a given plan.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The amounts recorded in AOCI as of the end of the period, which have not yet been recognized as a component of net periodic (benefit) cost, and the related changes in these items during the period that are recognized in "Other comprehensive income (loss)" are as follows:

|  | Pension Benefits |  |  | Other Postretirement Benefits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transition Obligation | Prior Service Cost | $\underset{\substack{\text { Net } \\ \text { (Gain) Loss }}}{ }$ | Transition Obligation | Prior Service Cost | Net Actuarial (Gain) Loss |
|  | (in millions) |  |  |  |  |  |
| Balance, December 31, 2013 | \$0 | \$(56) | \$2,065 | \$0 | \$(19) | \$463 |
| Amortization for the period | 0 | 10 | (86) | 0 | 10 | (25) |
| Deferrals for the period | 0 | (1) | 1,001 | 0 | 0 | 165 |
| Impact of foreign currency changes and other | 0 | 5 | (34) | 0 | 1 | (3) |
| Balance, December 31, 2014 | 0 | (42) | 2,946 | 0 | (8) | 600 |
| Amortization for the period | 0 | 8 | (168) | 0 | 5 | (38) |
| Deferrals for the period | 0 | 0 | 405 | 0 | 2 | 63 |
| Impact of foreign currency changes and other | 0 | 1 | (10) | 0 | 0 | (4) |
| Balance, December 31, 2015 | 0 | (33) | 3,173 | 0 | (1) | 621 |
| Amortization for the period | 0 | 6 | (181) | 0 | 2 | (41) |
| Deferrals for the period | 0 | 3 | 473 | 0 | 0 | (23) |
| Impact of foreign currency changes and other | 0 | (1) | 16 | 0 | 0 | 0 |
| Balance, December 31, 2016 | \$0 | \$(25) | \$3,481 | \$0 | \$ 1 | \$557 |

The amounts included in AOCI expected to be recognized as components of net periodic (benefit) cost in 2017 are as follows:

|  | Pension Benefits | Other <br> Postretirement Benefits |
| :---: | :---: | :---: |
|  | (in mil | ions) |
| Amortization of prior service cost | \$ (4) | \$ 0 |
| Amortization of actuarial (gain) loss, net | 191 | 36 |
| Total | \$187 | \$36 |

The Company's assumptions related to the calculation of the domestic benefit obligation (end of period) and the determination of net periodic (benefit) cost (beginning of period) are presented in the table below:

|  | Pension Benefits |  |  | Other Postretirement Benefits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 | 2016 | 2015 | 2014 |
| Weighted average assumptions |  |  |  |  |  |  |
| Discount rate (beginning of period) | 4.50\% | 4.10\% | 4.95\% | 4.35\% | 3.95\% | 4.75\% |
| Discount rate (end of period) | 4.15\% | 4.50\% | 4.10\% | 4.05\% | 4.35\% | 3.95\% |
| Rate of increase in compensation levels (beginning of period) | 4.50\% | 4.50\% | 4.50\% | N/A | N/A | N/A |
| Rate of increase in compensation levels (end of period) | 4.50\% | 4.50\% | 4.50\% | N/A | N/A | N/A |
| Expected return on plan assets (beginning of period) | 6.25\% | 6.25\% | 6.25\% | 7.00\% | 7.00\% | 7.00\% |
| Health care cost trend rates (beginning of period) | N/A | N/A | N/A | 7.00\% | 6.66\% | 7.08\% |
| Health care cost trend rates (end of period) | N/A | N/A | N/A | 6.60\% | 7.00\% | 6.66\% |
| For 2016, 2015 and 2014, the ultimate health care cost trend rate after gradual decrease until: 2019, 2019, 2019, (beginning of period) | N/A | N/A | N/A | 5.00\% | 5.00\% | 5.00\% |
| For 2016, 2015 and 2014, the ultimate health care cost trend rate after gradual decrease until: 2021, 2021, 2019 (end of period) | N/A | N/A | N/A | 5.00\% | 5.00\% | 5.00\% |

The domestic discount rate used to value the pension and postretirement obligations at December 31, 2016 and December 31, 2015 is based upon the value of a portfolio of Aa-rated investments whose cash flows would be available to pay the benefit obligation's cash flows when due. The December 31, 2016 portfolio is selected from a compilation of approximately 720 Aa-rated bonds across the full range of maturities. Since yields can vary widely at each maturity point, the Company generally avoids using the highest and lowest yielding bonds at the maturity points, so as to avoid relying on bonds that might be mispriced or misrated. This refinement process generally results in having a distribution from the 10th to 90th percentile. The Aa-rated portfolio is then selected and, accordingly, its value is a measure of the benefit obligation. A single equivalent discount rate is calculated to equate the value of the Aa-rated portfolio to the cash flows for the benefit obligation. The result is rounded to the nearest 5 basis points and the benefit obligation is recalculated using the rounded discount rate.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The pension and postretirement expected long-term rates of return on plan assets for 2016 were determined based upon an approach that considered the allocation of plan assets as of December 31, 2015. Expected returns are estimated by asset class as noted in the discussion of investment policies and strategies below. Expected returns on asset classes are developed using a building-block approach that is forward looking and are not strictly based upon historical returns. The building blocks for equity returns include inflation, real return, a term premium, an equity risk premium, capital appreciation, effect of active management, expenses and the effect of rebalancing. The building blocks for fixed maturity returns include inflation, real return, a term premium, credit spread, capital appreciation, effect of active management, expenses and the effect of rebalancing.

The Company applied the same approach to the determination of the expected rate of return on plan assets in 2017. The expected rate of return for 2017 is $6.25 \%$ and $7.00 \%$ for pension and postretirement, respectively.

The assumptions for foreign pension plans are based on local markets. There are no material foreign postretirement plans.
Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plan. A one-percentage point increase and decrease in assumed health care cost trend rates would have the following effects:

## Other Postretirement Benefits

(in millions)

## One percentage point increase


Increase in postretirement benefit obligation ......................................................................................................... 158
One percentage point decrease



## Plan Assets

The investment goal of the domestic pension plan assets is to generate an above benchmark return on a diversified portfolio of stocks, bonds and other investments. The cash requirements of the pension obligation, which include a traditional formula principally representing payments to annuitants and a cash balance formula that allows lump sum payments and annuity payments, are designed to be met by the bonds and short-term investments in the portfolio. The pension plan risk management practices include guidelines for asset concentration, credit rating and liquidity. The pension plan does not invest in leveraged derivatives. Derivatives such as futures contracts are used to reduce transaction costs and change asset concentration, while interest rate swaps and futures are used to adjust duration.

The investment goal of the domestic postretirement plan assets is to generate an above benchmark return on a diversified portfolio of stocks, bonds, and other investments, while meeting the cash requirements for the postretirement obligation that includes a medical benefit including prescription drugs, a dental benefit and a life benefit. The postretirement plan risk management practices include guidelines for asset concentration, credit rating, liquidity and tax efficiency. The postretirement plan does not invest in leveraged derivatives. Derivatives such as futures contracts are used to reduce transaction costs and change asset concentration, while interest rate swaps and futures are used to adjust duration.

The plan fiduciaries for the Company's pension and postretirement plans have developed guidelines for asset allocations reflecting a percentage of total assets by asset class, which are reviewed on an annual basis. Asset allocation targets as of December 31, 2016 are as follows:

|  | Pension |  | Postretirement |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Minimum | Maximum | Minimum | Maximum |
| Asset Category |  |  |  |  |
| U.S. Equities | 2\% | 16\% | 27\% | 60\% |
| International Equities | 2\% | 16\% | 2\% | 23\% |
| Fixed Maturities | 50\% | 68\% | 4\% | 50\% |
| Short-term Investments | 0\% | 15\% | 0\% | 42\% |
| Real Estate | 2\% | 16\% | 0\% | 0\% |
| Other | 0\% | 16\% | 0\% | 0\% |

To implement the investment strategy, plan assets are invested in funds that primarily invest in securities that correspond to one of the asset categories under the investment guidelines. However, at any point in time, some of the assets in a fund may be of a different nature than the specified asset category.

Assets held with Prudential Insurance are in either pooled separate accounts or single client separate accounts. Pooled separate accounts hold assets for multiple investors. Each investor owns a "unit of account." Single client separate accounts hold assets for only one investor, the domestic qualified pension plan, and each security in the fund is treated as individually owned. Assets held with a bank are either in common/collective trusts or single client trusts. Common or collective trusts hold assets for more than one investor. Each investor owns a "unit of account." Single client trusts hold assets for only one investor, the domestic qualified pension plan, and each security in the fund is treated as individually owned.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

There were no investments in Prudential Financial Common Stock as of December 31, 2016 and December 31, 2015 for either the pension or postretirement plans.

The authoritative guidance around fair value established a framework for measuring fair value. Fair value is disclosed using a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value, as described in Note 20.

The following describes the valuation methodologies used for pension and postretirement plans assets measured at fair value.
Insurance Company Pooled Separate Accounts, Common or Collective Trusts, and United Kingdom Insurance Pooled FundsInsurance company pooled separate accounts are invested via group annuity contracts issued by Prudential Insurance. Assets are represented by a "unit of account." The redemption value of those units is based on a per unit value whose value is the result of the accumulated values of underlying investments. The underlying investments are valued in accordance with the corresponding valuation method for the investments held.

Equities-See Note 20 for a discussion of the valuation methodologies for equity securities.
U.S. Government Securities (both Federal and State \& Other), Non-U.S. Government Securities, and Corporate Debt—See Note 20 for a discussion of the valuation methodologies for fixed maturity securities.

Interest Rate Swaps-See Note 20 for a discussion of the valuation methodologies for derivative instruments.
Guaranteed Investment Contracts-The value is based on contract cash flows and available market rates for similar investments.
Registered Investment Companies (Mutual Funds)—Securities are priced at the net asset value ("NAV") of shares.
Unrealized Gain (Loss) on Investment of Securities Lending Collateral-This value is the contractual position relative to the investment of securities lending collateral.

Real Estate-The values are determined through an independent appraisal process. The estimate of fair value is based on three approaches; (1) current cost of reproducing the property less deterioration and functional/economic obsolescence; (2) discounting a series of income streams and reversion at a specific yield or by directly capitalizing a single year income estimate by an appropriate factor; and (3) value indicated by recent sales of comparable properties in the market. Each approach requires the exercise of subjective judgment.

Short-term Investments-Securities are valued initially at cost and thereafter adjusted for amortization of any discount or premium (i.e., amortized cost). Amortized cost approximates fair value.

Partnerships-The value of interests owned in partnerships is based on valuations of the underlying investments that include private placements, structured debt, real estate, equities, fixed maturities, commodities and other investments.

Private equity and real estate partnerships do not provide redemption rights to their investors, and there is not a public market for these investments. The Plan's ability to redeem its investments at the end of the partnership term will depend on the ability of the fund manager to liquidate the illiquid private equity or real estate holdings. These funds are established with expected terms ranging from seven to fifteen years, with an option to extend the liquidation period for additional terms of up to two years.

Hedge Funds-The value of interests in hedge funds is based on the underlying investments that include equities, debt and other investments.

Hedge fund investments are structured as fund-of-funds vehicles or as direct investments in various hedge funds. The fund-of-funds vehicles are used for the purpose of making investments in a diverse portfolio of smaller hedge funds, while the direct investments allow for larger targeted investments without the additional fees inherent in a fund-of-funds structure. The hedge fund investments may be subject to initial period lock-up restrictions, under which capital must remain invested for a minimum period, ranging from one to two years. At December 31, 2016 and 2015, substantially none of the funds were in their initial lock-up period. Following the expiration of a fund's lock-up period, redemptions are permitted quarterly, semi-annually or annually, with advance written notice from 65 to 185 days, depending on the fund. However, redemptions from hedge funds and fund-of-funds may also be restricted by a maximum redemption limitation on any redemption payment date, generally stated as a percentage of the total fund assets or total investment by the redeeming investor; payments of redemptions in excess of that "gate" amount are deferred. The Plan's hedge fund investments include "gate" limits of $20 \%$ to $25 \%$ of the hedge fund's net assets, depending on the fund.

Variable Life Insurance Policies-These assets are held in group and individual variable life insurance policies issued by Prudential Insurance. Group policies are invested in Insurance Company Pooled Separate Accounts. Individual policies are invested in Registered Investment Companies (Mutual Funds). The value of interest in these policies is the cash surrender value of the policies based on the underlying investments.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Pension plan asset allocations in accordance with the investment guidelines are as follows:

|  | As of December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 | NAV <br> Practical Expedient | Total |
|  |  |  | (in millio |  |  |
| U.S. Equities: |  |  |  |  |  |
| Pooled separate accounts(1) |  | \$ 472 | \$ 0 | \$ 0 | \$ 472 |
| Common/collective trusts(1) | 0 | 66 | 0 | 0 | 66 |
| Subtotal |  |  |  |  | 538 |
| International Equities: |  |  |  |  |  |
| Pooled separate accounts(2) |  | 269 | 0 | 0 | 269 |
| Common/collective trusts(3) | 0 | 219 | 0 | 0 | 219 |
| United Kingdom insurance pooled funds(4) | 0 | 49 | 0 | 0 | 49 |
| Subtotal . |  |  |  |  | 537 |
| Fixed Maturities: |  |  |  |  |  |
| Pooled separate accounts(5) | 0 | 1,247 | 36 | 0 | 1,283 |
| Common/collective trusts(6) | 0 | 441 | 0 | 0 | 441 |
| U.S. government securities (federal): |  |  |  |  |  |
| Mortgage-backed |  | 1 | 0 | 0 | 1 |
| Other U.S. government securities | 0 | 993 | 0 | 0 | 993 |
| U.S. government securities (state \& other) | 0 | 521 | 0 | 0 | 521 |
| Non-U.S. government securities . | 0 | 14 | 0 | 0 | 14 |
| United Kingdom insurance pooled funds(7) | 0 | 305 | 0 | 0 | 305 |
| Corporate Debt: |  |  |  |  |  |
| Corporate bonds(8) | 0 | 4,039 | 0 | 0 | 4,039 |
| Asset-backed.. | 0 | 7 | 0 | 0 | 7 |
| Collateralized Mortgage Obligations(9) | 0 | 506 | 0 | 0 | 506 |
| Interest rate swaps (Notional amount: \$2,595) | 0 | 9 | 0 | 0 | 9 |
| Guaranteed investment contract | 0 | 39 | 0 | 0 | 39 |
| Other(10) ............................. | 533 | 7 | 49 | 0 | 589 |
| Unrealized gain (loss) on investment of securities lending collateral(11) | 0 | 0 | 0 | 0 | 0 |
| Subtotal. |  |  |  |  | 8,747 |
| Short-term Investments: |  |  |  |  |  |
| Pooled separate accounts | 0 | 55 | 0 | 0 | 55 |
| United Kingdom insurance pooled funds | 0 | 1 | 0 | 0 | 1 |
| Subtotal . |  |  |  |  | 56 |
| Real Estate: |  |  |  |  |  |
| Pooled separate accounts(12) | 0 | 0 | 666 | 0 | 666 |
| Partnerships | 0 | 0 | 0 | 371 | 371 |
| Subtotal |  |  |  |  | 1,037 |
| Other: |  |  |  |  |  |
| Partnerships | 0 | 0 | 0 | 551 | 551 |
| Hedge funds | 0 | 0 | 0 | 1,395 | 1,395 |
| Subtotal |  |  |  |  | 1,946 |
| Total | \$533 | \$9,260 | \$751 | \$2,317 | \$12,861 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  |  | As of | December | 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 | NAV <br> Practical Expedient | Total |
|  |  |  | (in millio |  |  |
| U.S. Equities: |  |  |  |  |  |
| Pooled separate accounts(1) | \$ 0 | \$ 636 | \$ 0 | \$ 0 | \$ 636 |
| Common/collective trusts(1) | 0 | 85 | 0 | 0 | 85 |
| Subtotal |  |  |  |  | 721 |
| International Equities: |  |  |  |  |  |
| Pooled separate accounts(2) | 0 | 321 | 0 | 0 | 321 |
| Common/collective trusts(3) | 0 | 229 | 0 | 0 | 229 |
| United Kingdom insurance pooled funds(4) | 0 | 50 | 0 | 0 | 50 |
| Subtotal |  |  |  |  | 600 |
| Fixed Maturities: |  |  |  |  |  |
| Pooled separate accounts(5) | 0 | 1,183 | 35 | 0 | 1,218 |
| Common/collective trusts(6) | 0 | 347 | 0 | 0 | 347 |
| U.S. government securities (federal): |  |  |  |  |  |
| Mortgage-backed | 0 | 1 | 0 | 0 | 1 |
| Other U.S. government securities | 0 | 661 | 0 | 0 | 661 |
| U.S. government securities (state \& other) | 0 | 582 | 0 | 0 | 582 |
| Non-U.S. government securities . | 0 | 14 | 0 | 0 | 14 |
| United Kingdom insurance pooled funds(7) | 0 | 293 | 0 | 0 | 293 |
| Corporate Debt: |  |  |  |  |  |
| Corporate bonds(8) | 0 | 4,417 | 0 | 0 | 4,417 |
| Asset-backed | 0 | 8 | 0 | 0 | 8 |
| Collateralized Mortgage Obligations(9) | 0 | 109 | 0 | 0 | 109 |
| Interest rate swaps (Notional amount: \$2,073) | 0 | (5) | 0 | 0 | (5) |
| Guaranteed investment contract | 0 | 31 | 0 | 0 | 31 |
| Other(10) .. | 685 | 2 | 93 | 0 | 780 |
| Unrealized gain (loss) on investment of securities lending collateral(13) | 0 | 0 | 0 | 0 | 0 |
| Subtotal |  |  |  |  | 8,456 |
| Short-term Investments: |  |  |  |  |  |
| Pooled separate accounts . . . . . | 0 | 39 | 0 | 0 | 39 |
| United Kingdom insurance pooled funds | 0 | 0 | 0 | 0 | 0 |
| Subtotal |  |  |  |  | 39 |
| Real Estate: |  |  |  |  |  |
| Pooled separate accounts(12) | 0 | 0 | 607 | 0 | 607 |
| Partnerships | 0 | 0 | 0 | 347 | 347 |
| Subtotal |  |  |  |  | 954 |
| Other: |  |  |  |  |  |
| Partnerships | 0 | 0 | 0 | 481 | 481 |
| Hedge funds | 0 | 0 | 0 | 1,290 | 1,290 |
| Subtotal |  |  |  |  | 1,771 |
| Total | \$685 | \$9,003 | \$735 | \$2,118 | \$12,541 |

[^13]
## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Changes in Fair Value of Level 3 Pension Assets

|  | Year En | ded December | 31, 2016 |
| :---: | :---: | :---: | :---: |
|  | Fixed MaturitiesPooled Separate Accounts | Fixed MaturitiesOther | Real EstatePooled Separate Accounts |
|  |  | (in millions) |  |
| Fair Value, beginning of period | \$35 | \$ 93 | \$607 |
| Actual Return on Assets: |  |  |  |
| Relating to assets still held at the reporting date | 1 | 0 | 61 |
| Relating to assets sold during the period | 0 | 0 | 6 |
| Purchases, sales and settlements | 0 | (44) | (8) |
| Transfers in and/or out of Level 3 | 0 | 0 | 0 |
| Fair Value, end of period | \$36 | \$ 49 | \$666 |


|  |  | Year Ended Dece | nber 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fixed MaturitiesPooled Separate Accounts | Fixed Maturities- Corporate Debt- Corporate Bonds | Fixed MaturitiesOther | Real EstatePooled Separate Accounts |
|  |  | (in milli |  |  |
| Fair Value, beginning of period | \$35 | \$ 14 | \$73 | \$465 |
| Actual Return on Assets: |  |  |  |  |
| Relating to assets still held at the reporting date | 0 | 0 | 0 | 81 |
| Relating to assets sold during the period | 0 | 0 | 0 | 2 |
| Purchases, sales and settlements | 0 | 0 | 20 | 59 |
| Transfers in and/or out of Level 3(1) | 0 | (14) | 0 | 0 |
| Fair Value, end of period | \$35 | \$ 0 | \$93 | \$607 |

(1) The transfers from level 3 to level 2 are due to the availability of external pricing sources.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Postretirement plan asset allocations in accordance with the investment guidelines are as follows:

|  | As of December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | $\frac{\text { Level } 3}{\text { (in millions }}$ | NAV Practical Expedient | Total |
|  |  |  |  |  |  |
| U.S. Equities: |  |  |  |  |  |
| Variable Life Insurance Policies(1) | \$ 0 | \$ 506 | \$ 0 | \$0 | \$ 506 |
| Common trusts(2) | 0 | 170 | 0 | 0 | 170 |
| Subtotal |  |  |  |  | 676 |
| International Equities: |  |  |  |  |  |
| Variable Life Insurance Policies(3) | 0 | 90 | 0 | 0 | 90 |
| Common trusts(4) | 0 | 96 | 0 | 0 | 96 |
| Subtotal . . . . . . . . |  |  |  |  | 186 |
| Fixed Maturities: |  |  |  |  |  |
| Variable Life Insurance Policies(5) | 0 | 157 | 0 | 0 | 157 |
| Common trusts(5) . | 0 | 59 | 0 | 0 | 59 |
| U.S. government securities (federal): |  |  |  |  |  |
| Mortgage-Backed | 0 | 0 | 0 | 0 | 0 |
| Other U.S. government securities | 0 | 78 | 0 | 0 | 78 |
| Non-U.S. government securities | 0 | 2 | 0 | 0 | 2 |
| Corporate Debt: |  |  |  |  |  |
| Corporate bonds(6) | 0 | 176 | 0 | 0 | 176 |
| Asset-Backed | 0 | 48 | 1 | 0 | 49 |
| Collateralized Mortgage Obligations(7) | 0 | 22 | 5 | 0 | 27 |
| Interest rate swaps (Notional amount: \$271) | 0 | 1 | 0 | 0 | 1 |
| Other(8) . ...... | 1 | 0 | 5 | 0 | 6 |
| Unrealized gain (loss) on investment of securities lending collateral(9) | 0 | 0 | 0 | 0 | 0 |
| Subtotal |  |  |  |  | 555 |
| Short-term Investments: |  |  |  |  |  |
| Registered investment companies . | 114 | 0 | 0 | 0 | 114 |
| Subtotal |  |  |  |  | 114 |
| Total | \$115 | \$1,405 | \$11 | \$0 | \$1,531 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | As of December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | $\frac{\text { Level } 3}{\text { (in millions }}$ | NAV Practical Expedient | Total |
|  |  |  |  |  |  |
| U.S. Equities: |  |  |  |  |  |
| Variable Life Insurance Policies(1) | \$ 0 | \$ 592 | \$0 | \$0 | \$ 592 |
| Common trusts(2) | 0 | 169 | 0 | 0 | 169 |
| Subtotal |  |  |  |  | 761 |
| International Equities: |  |  |  |  |  |
| Variable Life Insurance Policies(3) | 0 | 89 | 0 | 0 | 89 |
| Common trusts(4) | 0 | 97 | 0 | 0 | 97 |
| Subtotal |  |  |  |  | 186 |
| Fixed Maturities: |  |  |  |  |  |
| Variable Life Insurance Policies(5) | 0 | 59 | 0 | 0 | 59 |
| Common trusts(5) . . . . . | 0 | 67 | 0 | 0 | 67 |
| U.S. government securities (federal): |  |  |  |  |  |
| Mortgage-Backed | 0 | 4 | 0 | 0 | 4 |
| Other U.S. government securities | 0 | 80 | 0 | 0 | 80 |
| Non-U.S. government securities | 0 | 5 | 0 | 0 | 5 |
| Corporate Debt: |  |  |  |  |  |
| Corporate bonds(6) | 0 | 204 | 0 | 0 | 204 |
| Asset-Backed | 0 | 53 | 0 | 0 | 53 |
| Collateralized Mortgage Obligations(7) | 0 | 30 | 0 | 0 | 30 |
| Interest rate swaps (Notional amount: \$380) | 0 | 0 | 0 | 0 | 0 |
| Other(8) ......... | 6 | 0 | 3 | 0 | 9 |
| Unrealized gain (loss) on investment of securities lending collateral(10) | 0 | 0 | 0 | 0 | 0 |
| Subtotal . |  |  |  |  | 511 |
| Short-term Investments: |  |  |  |  |  |
| Registered investment companies . | 126 | 0 | 0 | 0 | 126 |
| Subtotal..... |  |  |  |  | 126 |
| Total | $\stackrel{\text { \$132 }}{\underline{-}}$ | $\stackrel{\$ 1,449}{ }$ | \$3 | \$0 | $\stackrel{\text { \$1,584 }}{ }$ |

(1) This category invests in U.S. equity funds, primarily large cap equities whose objective is to track an index via pooled separate accounts and registered investment companies.
(2) This category invests in U.S. equity funds, primarily large cap equities.
(3) This category invests in international equity funds, primarily large cap international equities whose objective is to track an index.
(4) This category fund invests in large cap international equity fund whose objective is to outperform an index.
(5) This category invests in U.S. government and corporate bond funds.
(6) This category invests in highly rated corporate bonds.
(7) This category invests in highly rated Collateralized Mortgage Obligations.
(8) Cash and cash equivalents, short-term investments, payables and receivables and open future contract positions (including fixed income collateral).
(9) In 2016, the contractual net value of the investment of securities lending collateral and the liability for securities lending collateral is zero.
(10) In 2015, the contractual net value of the investment of securities lending collateral invested in primarily short-term bond funds is $\$ 2$ million and the liability for securities lending collateral is $\$ 2$ million.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Changes in Fair Value of Level 3 Postretirement Assets

|  | Year Ended December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: |
|  | Fixed MaturitiesCorporate DebtCorporate Bonds | Fixed MaturitiesCorporate Debt-AssetBacked | $\qquad$ |
|  | (in millions) |  |  |
| Fair Value, beginning of period | \$0 | \$0 | \$3 |
| Actual Return on Assets: |  |  |  |
| Relating to assets still held at the reporting date | 0 | 0 | 0 |
| Relating to assets sold during the period | 0 | 0 | 0 |
| Purchases, sales and settlements | 1 | 5 | 2 |
| Transfers in and/or out of Level 3 | 0 | 0 | 0 |
| Fair Value, end of period | \$1 | \$5 | \$5 |
|  | Year Ended December 31, 2015 |  |  |
|  | Fixed <br> Maturities- <br> Corporate Debt- <br> Corporate <br> Bonds | Fixed <br> Maturities- <br> Corporate Debt- <br> Asset- <br> Backed | $\qquad$ |
|  |  | (in millions) |  |
| Fair Value, beginning of period | \$ 1 | \$ 1 | \$(5) |
| Actual Return on Assets: |  |  |  |
| Relating to assets still held at the reporting date | 0 | 0 | 0 |
| Relating to assets sold during the period | 0 | 0 | 0 |
| Purchases, sales and settlements | 0 | 0 | 8 |
| Transfers in and/or out of Level 3(1) | (1) | (1) | 0 |
| Fair Value, end of period | \$ 0 | \$ 0 | \$ 3 |

(1) The transfers from level 3 to level 2 are due to the availability of external pricing sources.

A summary of pension and postretirement plan asset allocation as of the year ended December 31, are as follows:

|  | Pension Percentage of Plan Assets |  | Postretirement Percentage of Plan Assets |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2016 | 2015 |
| Asset Category |  |  |  |  |
| U.S. Equities | 4\% | 6\% | 44\% | 48\% |
| International Equities | 4 | 5 | 12 | 12 |
| Fixed Maturities | 68 | 67 | 36 | 32 |
| Short-term Investments | 0 | 0 | 8 | 8 |
| Real Estate | 8 | 8 | 0 | 0 |
| Other | 16 | 14 | 0 | 0 |
| Total | 100\% | 100\% | 100\% | 100\% |

The expected benefit payments for the Company's pension and postretirement plans, as well as the expected Medicare Part D subsidy receipts related to the Company's postretirement plan, for the years indicated are as follows:

|  | Pension Benefit Payments | Other <br> Postretirement Benefit Payments | Other <br> Postretirement BenefitsMedicare Part D Subsidy Receipts |
| :---: | :---: | :---: | :---: |
|  |  | (in millions) |  |
| 2017 | \$ 707 | \$ 167 | \$ 10 |
| 2018 | 740 | 171 | 11 |
| 2019 | 762 | 173 | 11 |
| 2020 | 787 | 173 | 11 |
| 2021 | 812 | 173 | 12 |
| 2022-2026 | 4,384 | 835 | 63 |
| Total | \$8,192 | \$1,692 | \$118 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The Company anticipates that it will make cash contributions in 2017 of approximately $\$ 150$ million to the pension plans and approximately $\$ 10$ million to the postretirement plans.

## Postemployment Benefits

The Company accrues postemployment benefits for income continuance and health and life benefits provided to former or inactive employees who are not retirees. The net accumulated liability for these benefits at December 31, 2016 and 2015 was $\$ 20$ million and $\$ 48$ million, respectively, and is included in "Other liabilities."

## Other Employee Benefits

The Company sponsors voluntary savings plans for employees (401(k) plans). The plans provide for salary reduction contributions by employees and matching contributions by the Company of up to $4 \%$ of annual salary. The matching contributions by the Company included in "General and administrative expenses" were $\$ 72$ million, $\$ 64$ million and $\$ 60$ million for the years ended December 31, 2016, 2015 and 2014, respectively.

## 19. INCOME TAXES

The components of income tax expense (benefit) for the years ended December 31 were as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | n millions) |  |
| Current tax expense (benefit) |  |  |  |
| U.S. | \$ 31 | \$ 738 | \$ (80) |
| State and local | 9 | 3 | (7) |
| Foreign | 595 | 622 | 463 |
| Total | 635 | 1,363 | 376 |
| Deferred tax expense (benefit) |  |  |  |
| U.S. | 132 | 585 | 880 |
| State and local | 5 | 4 | 12 |
| Foreign | 563 | 120 | (919) |
| Total | 700 | 709 | (27) |
| Total income tax expense (benefit) on continuing operations before equity in earnings of operating joint ventures | 1,335 | 2,072 | 349 |
| Income tax expense on equity in earnings of operating joint ventures | 11 | (1) | (2) |
| Income tax expense on discontinued operations | 0 | , | 6 |
| Income tax expense (benefit) reported in equity related to: |  |  |  |
| Other comprehensive income | 1,305 | $(2,213)$ | 4,249 |
| Stock-based compensation programs | (30) | (22) | (29) |
| Total income taxes | \$2,621 | \$ (164) | \$4,573 |

In July 2014, the IRS issued guidance relating to the hedging of variable annuity guaranteed minimum benefits ("Hedging IDD"). The Hedging IDD provides an elective safe harbor tax accounting method for certain contracts which permits the current deduction of losses and the deferral of gains for hedging activities that can be applied to open years under IRS examination beginning with the earliest open year. The Company has applied this tax accounting method for hedging gains and losses covered by the Hedging IDD beginning with 2009. As a result of applying such accounting method, the Company's 2014 U.S. current tax benefit includes an additional tax benefit of $\$ 475$ million and a corresponding reduction of deferred tax assets.

The Company's actual income tax expense on continuing operations before equity in earnings of operating joint ventures for the years ended December 31 differs from the expected amount computed by applying the statutory federal income tax rate of $35 \%$ to income from continuing operations before income taxes and equity in earnings of operating joint ventures for the following reasons:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Expected federal income tax expense (benefit) | \$1,997 | \$2,719 | \$ 616 |
| Non-taxable investment income | (352) | (341) | (381) |
| Foreign taxes at other than U.S. rate | (172) | (51) | 146 |
| Low-income housing and other tax credits | (118) | (116) | (127) |
| Reversal of acquisition opening balance sheet deferred tax items | 0 | 0 | 53 |
| Change in repatriation assertion | 0 | (3) | 32 |
| Change in tax law: active financing exception | 0 | (108) | 0 |
| Other | (20) | (28) | 10 |
| Total income tax expense (benefit) on continuing operations | \$1,335 | \$2,072 | \$ 349 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The dividends received deduction ("DRD") reduces the amount of dividend income subject to U.S. tax and accounts for most of the non-taxable investment income shown in the table above, and as a result, is a major reason for the difference between the Company's effective tax rate and the federal statutory tax rate of $35 \%$. The DRD for the current period was estimated using information from 2015 and current year results, and was adjusted to take into account current year's equity market performance. The actual current year DRD can vary based on factors such as, but not limited to, changes in the amount of dividends received that are eligible for the DRD, changes in the amount of distributions received from fund investments, changes in the account balances of variable life and annuity contracts, and the Company's taxable income before the DRD. Additionally, there remains the possibility that the IRS and the U.S. Treasury will address, through subsequent guidance, issues related to the calculation of the DRD. For the last several years, the revenue proposals included in the Obama Administration's budgets included a proposal that would change the method used to determine the amount of the DRD. A change in the DRD, including the possible retroactive or prospective elimination of this deduction through guidance or legislation, could increase actual tax expense and reduce the Company's consolidated net income.

In December 2015, Congress enacted legislation renewing the Active Financing Exception ("AFE"), retroactive for tax years beginning on or after January 1, 2015 and made the provision a permanent part of the U.S. tax code. Under the AFE, subject to certain tests, foreign business income derived in the active conduct of an insurance business is not subject to U.S. tax until distributed to the U.S. As a result of the change in tax law, in 2015, the Company recognized a $\$ 108$ million tax benefit in "Income from continuing operations before equity in earnings of operating joint ventures." This amount relates to the reversal of $\$ 108$ million of tax expense associated with Prudential of Korea's and Prudential of Taiwan's unrealized investment gains originally included in AOCI. This provision will lower the Company's future U.S. tax liability on undistributed foreign earnings and increase after-tax results.

Total income tax expense includes additional income tax expense related to the realization of local deferred tax assets recorded in the Company's Consolidated Statements of Financial Position as of the acquisition date for Prudential Gibraltar Financial Life Insurance Company, Ltd. ("PGFL") and the Star and Edison Businesses. As of December 31, 2014, the entire amount of additional U.S. GAAP tax expense of $\$ 734$ million related to the utilization of opening balance sheet local deferred tax assets has been recognized in the Consolidated Statements of Operations.

Deferred tax assets and liabilities at December 31 resulted from the items listed in the following table:

|  | 2016 | 2015 |
| :---: | :---: | :---: |
|  | (in mil | ions) |
| Deferred tax assets |  |  |
| Insurance reserves | \$ 1,856 | \$ 2,878 |
| Policyholders' dividends | 1,849 | 1,815 |
| Net operating and capital loss carryforwards | 190 | 181 |
| Employee benefits | 789 | 628 |
| Investments | 1,166 | 530 |
| Other | 0 | 0 |
| Deferred tax assets before valuation allowance | 5,850 | 6,032 |
| Valuation allowance | (163) | (133) |
| Deferred tax assets after valuation allowance | 5,687 | 5,899 |
| Deferred tax liabilities |  |  |
| Net unrealized investment gains | 10,551 | 9,167 |
| Deferred policy acquisition costs | 4,443 | 4,179 |
| Investments | 0 | 0 |
| Unremitted foreign earnings | 380 | 290 |
| Value of business acquired | 715 | 903 |
| Other | 393 | 291 |
| Deferred tax liabilities | 16,482 | 14,830 |
| Net deferred tax liability | \$(10,795) | \$ (8,931) |

The application of U.S. GAAP requires the Company to evaluate the recoverability of deferred tax assets and establish a valuation allowance if necessary to reduce the deferred tax asset to an amount that is more likely than not expected to be realized. Considerable judgment is required in determining whether a valuation allowance is necessary, and if so, the amount of such valuation allowance. In evaluating the need for a valuation allowance, the Company considers many factors, including: (1) the nature of the deferred tax assets and liabilities; (2) whether they are ordinary or capital; (3) in which tax jurisdictions they were generated and the timing of their reversal; (4) taxable income in prior carryback years as well as projected taxable earnings exclusive of reversing temporary differences and carryforwards; (5) the length of time that carryovers can be utilized in the various taxing jurisdictions; (6) any unique tax rules that would impact the utilization of the deferred tax assets; and (7) any tax planning strategies that the Company would employ to avoid a tax benefit from expiring unused. Although realization is not assured, management believes it is more likely than not that the deferred tax assets, net of valuation allowances, will be realized.

A valuation allowance has been recorded against deferred tax assets related to state and local taxes and foreign operations. Adjustments to the valuation allowance are made to reflect changes in management's assessment of the amount of the deferred tax asset

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

that is realizable and the amount of deferred tax asset actually realized during the year. The valuation allowance includes amounts recorded in connection with deferred tax assets as of December 31 as follows:


The following table sets forth the federal, state and foreign operating, capital loss and tax credit carryforwards for tax purposes, as of December 31:

(1) Expires between 2017 and 2036.
(2) $\$ 21$ million expires between 2017 and 2025 and $\$ 24$ million has an unlimited carryforward.
(3) Alternative minimum tax credits do not expire.

The following table sets forth the Company's foreign operations and unremitted earnings for which the Company provides U.S. income taxes as of December 31, 2016:

| Foreign Operation | Unremitted earnings for which the Company provides U.S. income taxes |
| :---: | :---: |
| Japanese insurance operations | - Pre-2014 U.S. GAAP earnings <br> - Post-2013 realized and unrealized capital gains <br> - An additional amount from Gibraltar Life and Prudential Gibraltar, not to exceed the deferred tax asset recorded in the Statements of Financial Position as of the acquisition date for Prudential Gibraltar and the Star and Edison Businesses |
| Korean insurance operations Certain operations in Germany, Taiwan, Brazil, and non-insurance operations in Japan | Portion of post-2011 U.S. GAAP earnings U.S. GAAP earnings |

Unremitted foreign earnings from operations in other foreign jurisdictions are considered to be indefinitely reinvested.
During the fourth quarter of 2014, we determined that the current year operating earnings and AOCI, except realized and unrealized capital gains (losses), of our Japanese insurance operations will be treated as indefinitely reinvested. Consequently, we recognized a U.S. tax expense of $\$ 32$ million in "Income from continuing operations before equity in earnings of operating joint ventures" during 2014. During the third quarter of 2015, the Company determined that the earnings from its Brazilian insurance operations would be repatriated to the U.S. Accordingly, earnings from those Brazilian insurance operations were not considered indefinitely reinvested, and the Company recognized an income tax benefit of $\$ 3$ million in "Income from continuing operations before equity in earnings of operating joint ventures" during 2015. The Company made no changes with respect to its repatriation assumptions in 2016.

The following table sets forth the undistributed earnings of foreign subsidiaries, where the Company assumes indefinite reinvestment of such earnings and for which U.S. deferred taxes have not been provided, as of the periods indicated. Determining the tax liability that would arise if these earnings were remitted is not practicable.


The Company's income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures includes income from domestic operations of $\$ 1,242$ million, $\$ 4,235$ million and $\$ 3,487$ million, and income (loss) from foreign operations of $\$ 4,463$ million, $\$ 3,534$ million and $\$(1,728)$ million for the years ended December 31, 2016, 2015 and 2014, respectively.

The Company's liability for income taxes includes the liability for unrecognized tax benefits and interest that relate to tax years still subject to review by the IRS or other taxing authorities. The completion of review or the expiration of the Federal statute of limitations for a given audit period could result in an adjustment to the liability for income taxes.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The Company's unrecognized tax benefits for the years ended December 31 are as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Balance at January 1, | \$ 6 | \$6 | \$11 |
| Increases in unrecognized tax benefits-prior years | 10 | 0 | 0 |
| (Decreases) in unrecognized tax benefits-prior years | 0 | 0 | 0 |
| Increases in unrecognized tax benefits-current year | 10 | 0 | 0 |
| (Decreases) in unrecognized tax benefits-current year | 0 | 0 | 0 |
| Settlements with taxing authorities | 0 | 0 | (5) |
| Balance at December 31, | \$26 | \$6 | \$ 6 |
| Unrecognized tax benefits that, if recognized, would favorably impact the effective rate | \$26 | \$6 | \$ 6 |

The Company does not anticipate any significant changes within the next twelve months to its total unrecognized tax benefits related to tax years for which the statute of limitations has not expired.

The Company classifies all interest and penalties related to tax uncertainties as income tax expense (benefit). The amounts recognized in the consolidated financial statements for tax-related interest and penalties for the years ended December 31 are as follows:

| Interest and penalties recognized in the consolidated statements of operations | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
|  | \$1 | \$0 | \$2 |
|  |  | 2016 | 2015 |
|  | (in millions) |  |  |
| Interest and penalties recognized in liabilities in the consolidated statements of financial position |  | \$5 | \$4 |

Listed below are the tax years that remain subject to examination, by major tax jurisdiction, as of December 31, 2016:

| Major Tax Jurisdiction | Open Tax Years |
| :---: | :---: |
| United States | 2009-2015 |
| Japan | Fiscal years ended March 31, 2012-2016 |
| Korea | Fiscal years ended March 31, 2012 and 2013, the periods ended December 31, 2013-2016 |

The Company is participating in the IRS's Compliance Assurance Program. Under this program, the IRS assigns an examination team to review completed transactions as they occur in order to reach agreement with the Company on how they should be reported in the relevant tax returns. If disagreements arise, accelerated resolutions programs are available to resolve the disagreements in a timely manner before the tax return is filed.

Certain of the Company's affiliates in Japan file a consolidated tax return, while others file separate tax returns. The Company's affiliates in Japan are subject to audits by the local taxing authority. The general statute of limitations is five years from when the return is filed. During 2016, the Tokyo Regional Taxation Bureau concluded a routine tax audit of the tax returns of the Company's affiliates in Japan for their tax years ended March 31, 2013 to March 31, 2015. These activities had no material impact on the Company's 2014, 2015 or 2016 results.

The Company's affiliates in South Korea file separate tax returns and are subject to audits by the local taxing authority. The general statute of limitations is five years from when the return is filed. During 2015, the Korean National Tax Service concluded a routine tax audit of the tax returns of Prudential of Korea for the tax years ended March 31, 2010 to March 31, 2012. These activities had no material impact on the Company's 2014, 2015 or 2016 results.

## 20. FAIR VALUE OF ASSETS AND LIABILITIES

Fair Value Measurement-Fair value represents 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. The authoritative fair value guidance establishes a framework for measuring fair value that includes a hierarchy used to classify the inputs used in measuring fair value. The level in the fair value hierarchy within which the fair value measurement falls is determined based on the lowest level input that is significant to the fair value measurement. The levels of the fair value hierarchy are as follows:

Level 1-Fair value is based on unadjusted quoted prices in active markets that are accessible to the Company for identical assets or liabilities. The Company's Level 1 assets and liabilities primarily include certain cash equivalents and short-term investments, equity securities and derivative contracts that trade on an active exchange market.

Level 2-Fair value is based on significant inputs, other than quoted prices included in Level 1, that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability through corroboration with observable market

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

data. Level 2 inputs include quoted market prices in active markets for similar assets and liabilities, quoted market prices in markets that are not active for identical or similar assets or liabilities, and other market observable inputs. The Company's Level 2 assets and liabilities include: fixed maturities (corporate public and private bonds, most government securities, certain asset-backed and mortgage-backed securities, etc.), certain equity securities (mutual funds, which do not trade in active markets because they are not publicly available), certain commercial mortgage loans, short-term investments and certain cash equivalents (primarily commercial paper), and certain OTC derivatives.

Level 3-Fair value is based on at least one significant unobservable input for the asset or liability. The assets and liabilities in this category may require significant judgment or estimation in determining the fair value. The Company's Level 3 assets and liabilities primarily include: certain private fixed maturities and equity securities, certain manually priced public equity securities and fixed maturities, certain highly structured OTC derivative contracts, certain commercial mortgage loans, certain consolidated real estate funds for which the Company is the general partner and embedded derivatives resulting from certain products with guaranteed benefits.

Assets and Liabilities by Hierarchy Level-The tables below present the balances of assets and liabilities reported at fair value on a recurring basis, as of the dates indicated.

|  | As of December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 | Netting(1) | Total |
|  | (in millions) |  |  |  |  |
| Fixed maturities, available-for-sale: |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 0 | \$ 23,784 | \$ 0 | \$ | \$ 23,784 |
| Obligations of U.S. states and their political subdivisions . . . . . . . . . . . . . . . . . | 0 | 9,687 | 5 |  | 9,692 |
| Foreign government bonds | 0 | 96,132 | 124 |  | 96,256 |
| U.S. corporate public securities | 0 | 81,350 | 261 |  | 81,611 |
| U.S. corporate private securities(7) | 0 | 30,434 | 1,354 |  | 31,788 |
| Foreign corporate public securities | 0 | 28,166 | 71 |  | 28,237 |
| Foreign corporate private securities | 0 | 20,393 | 487 |  | 20,880 |
| Asset-backed securities(8) | 0 | 7,591 | 4,344 |  | 11,935 |
| Commercial mortgage-backed securities | 0 | 12,690 | 14 |  | 12,704 |
| Residential mortgage-backed securities | 0 | 4,335 | 197 |  | 4,532 |
| Subtotal | 0 | 314,562 | 6,857 |  | 321,419 |
| Trading account assets:(2) |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | 0 | 301 | 0 |  | 301 |
| Obligations of U.S. states and their political subdivisions | 0 | 194 | 0 |  | 194 |
| Foreign government bonds | 0 | 714 | 227 |  | 941 |
| Corporate securities | 0 | 16,992 | 188 |  | 17,180 |
| Asset-backed securities(8) | 0 | 1,086 | 329 |  | 1,415 |
| Commercial mortgage-backed securities | 0 | 2,061 | 1 |  | 2,062 |
| Residential mortgage-backed securities | 0 | 1,208 | 2 |  | 1,210 |
| Equity securities | 1,690 | 214 | 487 |  | 2,391 |
| All other(3) | 208 | 13,259 | 1 | $(11,708)$ | 1,760 |
| Subtotal | 1,898 | 36,029 | 1,235 | $(11,708)$ | 27,454 |
| Equity securities, available-for-sale | 6,033 | 3,450 | 265 |  | 9,748 |
| Commercial mortgage and other loans | 0 | 519 | 0 |  | 519 |
| Other long-term investments | 44 | 106 | 7 | (8) | 149 |
| Short-term investments | 5,623 | 1,558 | 1 |  | 7,182 |
| Cash equivalents | 3,885 | 4,421 | 0 |  | 8,306 |
| Other assets | 0 | 0 | 0 |  | 0 |
| Subtotal excluding separate account assets | 17,483 | 360,645 | 8,365 | $(11,716)$ | 374,777 |
| Separate account assets(4) | 38,915 | 221,253 | 1,849 |  | 262,017 |
| Total assets | \$56,398 | \$581,898 | \$10,214 | \$(11,716) | \$636,794 |
| Future policy benefits(5) | \$ 0 | \$ 0 | \$ 8,238 | \$ | \$ 8,238 |
| Other liabilities | 8 | 6,284 | 22 | $(5,945)$ | 369 |
| Notes issued by consolidated VIEs | 0 | 0 | 1,839 |  | 1,839 |
| Total liabilities | \$ 8 | \$ 6,284 | \$10,099 | \$ $(5,945)$ | \$ 10,446 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | As of December 31, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 | Netting(1) | Total |
|  | (in millions) |  |  |  |  |
| Fixed maturities, available-for-sale: |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | \$ 0 | \$ 18,517 | \$ 0 | \$ | \$ 18,517 |
| Obligations of U.S. states and their political subdivisions | 0 | 8,789 | 6 |  | 8,795 |
| Foreign government bonds | 0 | 83,590 | 123 |  | 83,713 |
| U.S. corporate public securities | 0 | 75,163 | 205 |  | 75,368 |
| U.S. corporate private securities(7) | 0 | 29,750 | 694 |  | 30,444 |
| Foreign corporate public securities | 0 | 28,510 | 44 |  | 28,554 |
| Foreign corporate private securities | 0 | 18,859 | 279 |  | 19,138 |
| Asset-backed securities(8) | 0 | 6,178 | 4,048 |  | 10,226 |
| Commercial mortgage-backed securities | 0 | 10,424 | 38 |  | 10,462 |
| Residential mortgage-backed securities | 0 | 4,923 | 183 |  | 5,106 |
| Subtotal | 0 | 284,703 | 5,620 |  | 290,323 |
| Trading account assets:(2) |  |  |  |  |  |
| U.S. Treasury securities and obligations of U.S. government authorities and agencies | 0 | 288 | 0 |  | 288 |
| Obligations of U.S. states and their political subdivisions | 0 | 189 | 0 |  | 189 |
| Foreign government bonds | 0 | 697 | 34 |  | 731 |
| Corporate securities | 0 | 23,125 | 203 |  | 23,328 |
| Asset-backed securities(8) | 0 | 749 | 596 |  | 1,345 |
| Commercial mortgage-backed securities | 0 | 1,870 | 3 |  | 1,873 |
| Residential mortgage-backed securities | 0 | 1,509 | 4 |  | 1,513 |
| Equity securities | 1,542 | 221 | 589 |  | 2,352 |
| All other(3) | 630 | 14,173 | 5 | $(11,447)$ | 3,361 |
| Subtotal | 2,172 | 42,821 | 1,434 | $(11,447)$ | 34,980 |
| Equity securities, available-for-sale | 6,011 | 2,997 | 266 |  | 9,274 |
| Commercial mortgage and other loans | 0 | 274 | 0 |  | 274 |
| Other long-term investments(6) | 13 | 130 | 49 | (10) | 182 |
| Short-term investments | 6,776 | 711 | 0 |  | 7,487 |
| Cash equivalents | 4,834 | 9,374 | 0 |  | 14,208 |
| Other assets | 0 | 9 | 7 |  | 16 |
| Subtotal excluding separate account assets | 19,806 | 341,019 | 7,376 | $(11,457)$ | 356,744 |
| Separate account assets(4)(6) | 43,076 | 214,838 | 1,995 |  | 259,909 |
| Total assets | \$62,882 | \$555,857 | \$ 9,371 | \$(11,457) | \$616,653 |
| Future policy benefits(5) | \$ 0 | \$ 0 | \$ 8,434 | \$ | \$ 8,434 |
| Other liabilities | 1 | 5,306 | 2 | $(5,276)$ | 33 |
| Notes issued by consolidated VIEs | 0 | 0 | 8,597 |  | 8,597 |
| Total liabilities | \$ 1 | \$ 5,306 | \$17,033 | \$ $(5,276)$ | \$ 17,064 |

(1) "Netting" amounts represent cash collateral of $\$ 5,771$ million and $\$ 6,181$ million as of December 31, 2016 and 2015, respectively, and the impact of offsetting asset and liability positions held with the same counterparty, subject to master netting arrangements.
(2) Includes "Trading account assets supporting insurance liabilities" and "Other trading account assets."
(3) Level 1 represents cash equivalents and short term investments. All other amounts primarily represent derivative assets.
(4) Separate account assets represent segregated funds that are invested for certain customers. Investment risks associated with market value changes are borne by the customers, except to the extent of minimum guarantees made by the Company with respect to certain accounts. Separate account liabilities are not included in the above table as they are reported at contract value and not fair value in the Company's Consolidated Statements of Financial Position.
(5) As of December 31, 2016, the net embedded derivative liability position of $\$ 8.2$ billion includes $\$ 1.2$ billion of embedded derivatives in an asset position and $\$ 9.4$ billion of embedded derivatives in a liability position. As of December 31, 2015, the net embedded derivative liability position of $\$ 8.4$ billion includes $\$ 0.7$ billion of embedded derivatives in an asset position and $\$ 9.1$ billion of embedded derivatives in a liability position.
(6) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-07.
(7) Excludes notes with fair value of $\$ 1,456$ million and $\$ 1,039$ million as of December 31, 2016 and 2015, respectively, which have been offset with the associated payables under a netting agreement.
(8) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.

The methods and assumptions the Company uses to estimate the fair value of assets and liabilities measured at fair value on a recurring basis are summarized below.

Fixed Maturity Securities-The fair values of the Company's public fixed maturity securities are generally based on prices obtained from independent pricing services. Prices for each security are generally sourced from multiple pricing vendors, and a vendor hierarchy is maintained by asset type based on historical pricing experience and vendor expertise. The Company ultimately uses the price from the pricing service highest in the vendor hierarchy based on the respective asset type. The pricing hierarchy is updated for new financial

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

products and recent pricing experience with various vendors. Consistent with the fair value hierarchy described above, securities with validated quotes from pricing services are generally reflected within Level 2, as they are primarily based on observable pricing for similar assets and/or other market observable inputs. Typical inputs used by these pricing services include but are not limited to, reported trades, benchmark yields, issuer spreads, bids, offers, and/or estimated cash flow, prepayment speeds and default rates. If the pricing information received from third-party pricing services is deemed not reflective of market activity or other inputs observable in the market, the Company may challenge the price through a formal process with the pricing service or classify the securities as Level 3. If the pricing service updates the price to be more consistent with the presented market observations, the security remains within Level 2.

Internally-developed valuations or indicative broker quotes are also used to determine fair value in circumstances where vendor pricing is not available, or where the Company ultimately concludes that pricing information received from the independent pricing services is not reflective of market activity. If the Company concludes the values from both pricing services and brokers are not reflective of market activity, it may override the information with an internally-developed valuation. As of December 31, 2016 and 2015, overrides on a net basis were not material. Pricing service overrides, internally-developed valuations and indicative broker quotes are generally included in Level 3 in the fair value hierarchy.

The Company conducts several specific price monitoring activities. Daily analyses identify price changes over predetermined thresholds defined at the financial instrument level. Various pricing integrity reports are reviewed on a daily and monthly basis to determine if pricing is reflective of market activity or if it would warrant any adjustments. Other procedures performed include, but are not limited to, reviews of third-party pricing services methodologies, reviews of pricing trends and back testing.

The fair value of private fixed maturities, which are comprised of investments in private placement securities, originated by internal private asset managers, are primarily determined using discounted cash flow models. These models primarily use observable inputs that include Treasury or similar base rates plus estimated credit spreads to value each security. The credit spreads are obtained through a survey of private market intermediaries who are active in both primary and secondary transactions, and consider, among other factors, the credit quality and industry sector of the issuer and the reduced liquidity associated with private placements. Since most private placements are valued using standard market observable inputs and inputs derived from, or corroborated by, market observable data including observed prices and spreads for similar publicly-traded or privately-traded issues, they have been reflected within Level 2. For certain private fixed maturities, the discounted cash flow model may incorporate significant unobservable inputs, which reflect the Company's own assumptions about the inputs that market participants would use in pricing the asset. To the extent management determines that such unobservable inputs are significant to the price of a security, a Level 3 classification is made.

Trading Account Assets-Trading account assets consist primarily of fixed maturity securities, equity securities and derivatives whose fair values are determined consistent with similar instruments described above under "Fixed Maturity Securities" and below under "Equity Securities" and "Derivative Instruments."

Equity Securities-Equity securities consist principally of investments in common and preferred stock of publicly-traded companies, perpetual preferred stock, privately-traded securities, as well as mutual fund shares. The fair values of most publicly-traded equity securities are based on quoted market prices in active markets for identical assets and are classified within Level 1 in the fair value hierarchy. Estimated fair values for most privately traded equity securities are determined using discounted cash flow, earnings multiple and other valuation models that require a substantial level of judgment around inputs and therefore are classified within Level 3. The fair values of mutual fund shares that transact regularly (but do not trade in active markets because they are not publicly available) are based on transaction prices of identical fund shares and are classified within Level 2 in the fair value hierarchy. The fair values of perpetual preferred stock are based on inputs obtained from independent pricing services that are primarily based on indicative broker quotes. As a result, the fair values of perpetual preferred stock are classified as Level 3.

Commercial Mortgage and Other Loans-The fair value of loans held and accounted for using the fair value option is determined utilizing pricing indicators from the whole loan market, where investors are committed to purchase these loans at a predetermined price, which is considered the principal exit market for these loans. The Company evaluates the valuation inputs used for these assets, including the existence of predetermined exit prices, the terms of the loans, prevailing interest rates and credit risk, and deems the primary pricing inputs are Level 2 inputs in the fair value hierarchy.

Other Long-Term Investments-Other long-term investments include limited partnerships which are consolidated because the Company is either deemed to exercise control or considered the primary beneficiary of a variable interest entity. These entities are primarily investment companies and follow specialized industry accounting whereby their assets are carried at fair value. The investments held by these entities include various feeder fund investments in underlying master funds (whose underlying holdings generally include public fixed maturities, equity securities and mutual funds), as well as wholly-owned real estate held within other investment funds. For the unconsolidated fund investments, where the Company has elected the fair value option, the fair value is primarily determined by the fund managers and is measured at NAV as a practical expedient.

Effective January 1, 2016, the Company adopted new accounting guidance (ASU 2015-07, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share or Its Equivalent (Topic 820)), which removes the requirement to categorize within the fair value hierarchy all investments measured at net asset value per share (or its equivalent) as a practical expedient. As a result of the adoption of this new guidance, certain other long-term investments are no longer classified in the fair value hierarchy. The guidance was required to be applied retrospectively, and therefore, prior period amounts have been conformed to the current period presentation. At December 31, 2016 and 2015, the fair values of these investments, which include certain hedge funds, private equity funds and other funds were $\$ 1,579$ million and $\$ 1,413$ million, respectively, of which $\$ 82$ million and $\$ 1,331$ million had been previously classified in Level 2 and Level 3, respectively, at December 31, 2015.

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## Notes to Consolidated Financial Statements

Other Assets-Other assets reflected in Level 3 include reinsurance recoverables which are carried at fair value and relate to the reinsurance of the Company's living benefit guarantees on certain variable annuity contracts. The methods and assumptions used to estimate the fair value are consistent with those described in "Future Policy Benefits."

Derivative Instruments-Derivatives are recorded at fair value either as assets, within "Other trading account assets," or "Other long-term investments," or as liabilities, within "Other liabilities," except for embedded derivatives which are recorded with the associated host contract. The fair values of derivative contracts can be affected by changes in interest rates, foreign exchange rates, commodity prices, credit spreads, market volatility, expected returns, NPR, liquidity and other factors. For derivative positions included within Level 3 of the fair value hierarchy, liquidity valuation adjustments are made to reflect the cost of exiting significant risk positions, and consider the bid-ask spread, maturity, complexity and other specific attributes of the underlying derivative position.

The Company's exchange-traded futures and options include Treasury futures, Eurodollar futures, commodity futures, Eurodollar options and commodity options. Exchange-traded futures and options are valued using quoted prices in active markets and are classified within Level 1 in the fair value hierarchy.

The majority of the Company's derivative positions are traded in the OTC derivative market and are classified within Level 2 in the fair value hierarchy. OTC derivatives classified within Level 2 are valued using models that utilize actively quoted or observable market input values from external market data providers, third-party pricing vendors and/or recent trading activity. The Company's policy is to use mid-market pricing in determining its best estimate of fair value. The fair values of most OTC derivatives, including interest rate and crosscurrency swaps, currency forward contracts, commodity swaps, commodity forward contracts, single name credit default swaps, loan commitments held for sale and "to be announced" ("TBA") forward contracts on highly rated mortgage-backed securities issued by U.S. government sponsored entities are determined using discounted cash flow models. The fair values of European style option contracts are determined using Black-Scholes option pricing models. These models' key inputs include the contractual terms of the respective contract, along with significant observable inputs, including interest rates, currency rates, credit spreads, equity prices, index dividend yields, NPR, volatility and other factors.

The Company's cleared interest rate swaps and credit derivatives linked to an index are valued using models that utilize actively quoted or observable market inputs, including Overnight Indexed Swap discount rates, obtained from external market data providers, thirdparty pricing vendors and/or recent trading activity. These derivatives are classified as Level 2 in the fair value hierarchy.

The vast majority of the Company's derivative agreements are with highly rated major international financial institutions. To reflect the market's perception of its own and the counterparty's NPR, the Company incorporates additional spreads over London Inter-Bank Offered Rate ("LIBOR") into the discount rate used in determining the fair value of OTC derivative assets and liabilities that are not otherwise collateralized.

Derivatives classified as Level 3 include look-back equity options and other structured products. These derivatives are valued based upon models, such as Monte Carlo simulation models and other techniques that utilize significant unobservable inputs. Level 3 methodologies are validated through periodic comparison of the Company's fair values to external broker-dealer values.

Cash Equivalents and Short-Term Investments-Cash equivalents and short-term investments include money market instruments, commercial paper and other highly liquid debt instruments. Certain money market instruments are valued using unadjusted quoted prices in active markets that are accessible for identical assets and are primarily classified as Level 1 . The remaining instruments in this category are generally fair valued based on market observable inputs and these investments have primarily been classified within Level 2.

Separate Account Assets-Separate account assets include fixed maturity securities, treasuries, equity securities and mutual funds for which values are determined consistent with similar instruments described above under "Fixed Maturity Securities" and "Equity Securities."

Effective January 1, 2016, the Company adopted new accounting guidance (ASU 2015-07, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share or Its Equivalent (Topic 820)), which removes the requirement to categorize within the fair value hierarchy all investments measured at net asset value per share (or its equivalent) as a practical expedient. As a result of the adoption of this new guidance, certain separate account assets are no longer classified in the fair value hierarchy. The guidance was required to be applied retrospectively, and therefore, prior period amounts have been conformed to the current period presentation. At December 31, 2016 and 2015, the fair values of Separate Account Assets excluded from the fair value hierarchy, which include investments in real estate and other invested assets, were $\$ 25,619$ million and $\$ 25,661$ million, respectively, which had been previously classified in Level 3 at December 31, 2015.

Notes issued by Consolidated VIEs-These notes are based on the fair values of corresponding bank loan collateral. Since the notes are valued based on reference collateral, they are classified as Level 3. See Note 5 and "Fair Value Option" below for additional information.

Other Liabilities-Other liabilities include certain derivative instruments, including embedded derivatives associated with certain "Policyholders' account balances." The fair values are primarily determined consistent with similar derivative instruments described above under "Derivative Instruments."

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Future Policy Benefits-The liability for future policy benefits is related to guarantees primarily associated with the living benefit features of certain variable annuity contracts offered by the Company's Individual Annuities segment, including guaranteed minimum accumulation benefit, guaranteed minimum withdrawal benefits and guaranteed minimum income and withdrawal benefits, accounted for as embedded derivatives. The fair values of these liabilities are calculated as the present value of future expected benefit payments to customers less the present value of future expected rider fees attributable to the embedded derivative feature. This methodology could result in either a liability or contra-liability balance, given changing capital market conditions and various actuarial assumptions. Since there is no observable active market for the transfer of these obligations, the valuations are calculated using internally-developed models with option pricing techniques. The models are based on a risk neutral valuation framework and incorporate premiums for risks inherent in valuation techniques, inputs, and the general uncertainty around the timing and amount of future cash flows. The determination of these risk premiums requires the use of management's judgment.

The significant inputs to the valuation models for these embedded derivatives include capital market assumptions, such as interest rate levels and volatility assumptions, the Company's market-perceived NPR, as well as actuarially determined assumptions, including contractholder behavior, such as lapse rates, benefit utilization rates, withdrawal rates, and mortality rates. Since many of these assumptions are unobservable and are considered to be significant inputs to the liability valuation, the liability included in future policy benefits has been reflected within Level 3 in the fair value hierarchy.

Capital market inputs and actual policyholders' account values are updated each quarter based on capital market conditions as of the end of the quarter, including interest rates, equity markets and volatility. In the risk neutral valuation, the initial swap curve drives the total return used to grow the policyholders' account values. The Company's discount rate assumption is based on the LIBOR swap curve adjusted for an additional spread relative to LIBOR to reflect NPR.

Actuarial assumptions, including contractholder behavior and mortality, are reviewed at least annually, and updated based upon emerging experience, future expectations and other data, including any observable market data. These assumptions are generally updated annually unless a material change that the Company feels is indicative of a long term trend is observed in an interim period.

Transfers between Levels 1 and 2-Transfers between levels are made to reflect changes in observability of inputs and market activity. Transfers into or out of any level are generally reported as the value as of the beginning of the quarter in which the transfers occur for any such assets still held at the end of the quarter. Periodically there are transfers between Level 1 and Level 2 for assets held in the Company's Separate Account. The fair value of foreign common stock held in the Company's Separate Account may reflect differences in market levels between the close of foreign trading markets and the close of U.S. trading markets for the respective day. Dependent on the existence of such a timing difference, the assets may move between Level 1 and Level 2. During the year ended December 31, 2016, $\$ 0.1$ billion were transferred from Level 1 to Level 2 and $\$ 0.0$ billion were transferred from Level 2 to Level 1. During the year ended December 31, 2015, $\$ 0.2$ billion were transferred from Level 1 to Level 2 and $\$ 0.2$ billion were transferred from Level 2 to Level 1.

Level 3 Assets and Liabilities by Price Source-The table below presents the balances of Level 3 assets and liabilities measured at fair value with their corresponding pricing sources.

|  | As of | ecember 31, |  |
| :---: | :---: | :---: | :---: |
|  | Internal(1) | External(2) | Total |
|  |  | n millions) |  |
| Obligations of U.S. states and their political subdivisions | \$ 5 | \$ 0 | \$ 5 |
| Foreign government bonds | 0 | 351 | 351 |
| Corporate securities(3) | 1,848 | 513 | 2,361 |
| Asset-backed securities(4) | 148 | 4,525 | 4,673 |
| Commercial mortgage-backed securities | 14 | 1 | 15 |
| Residential mortgage-backed securities | 18 | 181 | 199 |
| Equity securities | 143 | 609 | 752 |
| Other long-term investments | 6 | 1 | 7 |
| Short-term investments | 1 | 0 | 1 |
| Other assets | 1 | 0 | 1 |
| Subtotal excluding separate account assets | 2,184 | 6,181 | 8,365 |
| Separate account assets | 1,179 | 670 | 1,849 |
| Total assets | \$3,363 | \$6,851 | \$10,214 |
| Future policy benefits | \$8,238 | \$ 0 | \$ 8,238 |
| Other liabilities | 22 | 0 | 22 |
| Notes issued by consolidated VIEs | 0 | 1,839 | 1,839 |
| Total liabilities | \$8,260 | \$1,839 | \$10,099 |

## PRUDENTIAL FINANCIAL, INC.

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|  | As of December 31, 2015 |  |  |
| :---: | :---: | :---: | :---: |
|  | Internal(1) | External(2) | Total |
|  | (in millions) |  |  |
| Obligations of U.S. states and their political subdivisions | \$ 6 | \$ 0 | \$ 6 |
| Foreign government bonds | 0 | 157 | 157 |
| Corporate securities(3) | 1,085 | 340 | 1,425 |
| Asset-backed securities(4) | 149 | 4,495 | 4,644 |
| Commercial mortgage-backed securities | 5 | 36 | 41 |
| Residential mortgage-backed securities | 37 | 150 | 187 |
| Equity securities | 63 | 792 | 855 |
| Other long-term investments(5) | 39 | 10 | 49 |
| Other assets | 12 | 0 | 12 |
| Subtotal excluding separate account assets | 1,396 | 5,980 | 7,376 |
| Separate account assets(5) | 1,024 | 971 | 1,995 |
| Total assets | \$2,420 | \$6,951 | \$ 9,371 |
| Future policy benefits | \$8,434 | \$ 0 | \$ 8,434 |
| Other liabilities | 2 | 0 | 2 |
| Notes issued by consolidated VIEs | 0 | 8,597 | 8,597 |
| Total liabilities | \$8,436 | \$8,597 | \$17,033 |

(1) Represents valuations reflecting both internally-derived and market inputs, as well as third-party pricing information or quotes. See below for additional information related to internally-developed valuation for significant items in the above table.
(2) Represents unadjusted prices from independent pricing services and independent indicative broker quotes where pricing inputs are not readily available.
(3) Includes assets classified as fixed maturities available-for-sale, trading account assets supporting insurance liabilities and other trading account assets.
(4) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.
(5) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-07.

Quantitative Information Regarding Internally-Priced Level 3 Assets and Liabilities-The tables below present quantitative information on significant internally-priced Level 3 assets and liabilities (see narrative below for quantitative information for separate account assets).

|  | As of December 31, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value | Valuation Techniques | Unobservable Inputs | Minimum |  | Maximum | Weighted Average | Impact of Increase in Input on Fair Value(1) |
|  | (in millions) |  |  |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |
| Corporate securities(2) | \$1,848 | Discounted cash flow | Discount rate | 0.70\% | - | 20\% | 7.12\% | Decrease |
|  |  | Market comparables | EBITDA multiples(3) | 4.0X | - | 4.0X | 4.0X | Increase |
|  |  | Liquidation | Liquidation value |  | - |  | 91.72\% | Increase |
| Liabilities: |  |  |  |  |  |  |  |  |
| Future policy benefits(4) | \$8,238 | Discounted cash flow | Lapse rate(5) | 0\% | - | 13\% |  | Decrease |
|  |  |  | NPR spread(6) | 0.25\% | - | 1.50\% |  | Decrease |
|  |  |  | Utilization rate(7) | 52\% | - | 96\% |  | Increase |
|  |  |  | Withdrawal rate |  |  | See table f | footnote (8) | below. |
|  |  |  | Mortality rate(9) | 0\% | - | 14\% |  | Decrease |
|  |  |  | Equity volatility curve | 16\% | - | 25\% |  | Increase |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements


(1) Conversely, the impact of a decrease in input would have the opposite impact for the fair value as that presented in the table.
(2) Includes assets classified as fixed maturities available-for-sale, trading account assets supporting insurance liabilities and other trading account assets.
(3) Represents multiples of earnings before interest, taxes, depreciation and amortization ("EBITDA"), and are amounts used when the reporting entity has determined that market participants would use such multiples when pricing the investments.
(4) Future policy benefits primarily represent general account liabilities for the living benefit features of the Company's variable annuity contracts which are accounted for as embedded derivatives. Since the valuation methodology for these liabilities uses a range of inputs that vary at the contract level over the cash flow projection period, presenting a range, rather than weighted average, is a more meaningful representation of the unobservable inputs used in the valuation.
(5) Lapse rates are adjusted at the contract level based on the in-the-moneyness of the living benefit and reflect other factors, such as the applicability of any surrender charges. Lapse rates are reduced when contracts are more in-the-money. Lapse rates are also generally assumed to be lower for the period where surrender charges apply.
(6) To reflect NPR, the Company incorporates an additional spread over LIBOR into the discount rate used in the valuation of individual living benefit contracts in a liability position and generally not to those in a contra-liability position. The NPR spread reflects the financial strength ratings of the Company, as these are insurance liabilities and senior to debt. The additional spread over LIBOR is determined by utilizing the credit spreads associated with issuing funding agreements, adjusted for any illiquidity risk premium.
(7) The utilization rate assumption estimates the percentage of contracts that will utilize the benefit during the contract duration, and begin lifetime withdrawals at various time intervals from contract inception. The remaining contractholders are assumed to either begin lifetime withdrawals immediately or never utilize the benefit. Utilization assumptions may vary by product type, tax status, and age. The impact of changes in these assumptions is highly dependent on the product type, the age of the contractholder at the time of the sale, and the timing of the first lifetime income withdrawal. Range reflects the utilization rate for the vast majority of business with living benefits.
(8) The withdrawal rate assumption estimates the magnitude of annual contractholder withdrawals relative to the maximum allowable amount under the contract. These assumptions vary based on the age of the contractholder, the tax status of the contract and the duration since the contractholder began lifetime withdrawals. As of December 31, 2016, the minimum withdrawal rate assumption is $78 \%$ and the maximum withdrawal rate assumption may be greater than $100 \%$. The fair value of the liability will generally increase the closer the withdrawal rate is to $100 \%$ and decrease as the withdrawal rate moves further away from $100 \%$.
(9) Range reflects the mortality rate for the vast majority of business with living benefits, with policyholders ranging from 35 to 90 years old. While the majority of living benefits have a minimum age requirement, certain benefits do not have an age restriction. This results in contractholders for certain benefits with mortality rates approaching $0 \%$. Based on historical experience, the Company applies a set of age and duration specific mortality rate adjustments compared to standard industry tables. A mortality improvement assumption is also incorporated into the overall mortality table.

Interrelationships Between Unobservable Inputs-In addition to the sensitivities of fair value measurements to changes in each unobservable input in isolation, as reflected in the table above, interrelationships between these inputs may also exist, such that a change in one unobservable input may give rise to a change in another or multiple inputs. Examples of such interrelationships for significant internally-priced Level 3 assets and liabilities are as follows:

Corporate Securities-The rate used to discount future cash flows reflects current risk-free rates plus credit and liquidity spread requirements that market participants would use to value an asset. The discount rate may be influenced by many factors, including market cycles, expectations of default, collateral, term, and asset complexity. Each of these factors can influence discount rates, either in isolation, or in response to other factors.

Future Policy Benefits-The Company expects efficient benefit utilization and withdrawal rates to generally be correlated with lapse rates. However, behavior is generally highly dependent on the facts and circumstances surrounding the individual contractholder, such as their liquidity needs or tax situation, which could drive lapse behavior independent of other contractholder behavior assumptions. To the extent more efficient contractholder behavior results in greater in-the-moneyness at the contract level, lapse rates may decline for those contracts. Similarly, to the extent that increases in equity volatility are correlated with overall declines in the capital markets, lapse rates may decline as contracts become more in-the-money.

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## Notes to Consolidated Financial Statements

Separate Account Assets-In addition to the significant internally-priced Level 3 assets and liabilities presented and described above, the Company also has internally-priced separate account assets reported within Level 3. Changes in the fair value of separate account assets are borne by customers and thus are offset by changes in separate account liabilities on the Company's Consolidated Statements of Financial Position. As a result, changes in value associated with these investments are not reflected in the Company's Consolidated Statements of Operations. Quantitative information about significant internally-priced Level 3 separate account assets is as follows:

Commercial Mortgage Loans-Separate account assets include $\$ 971$ million and $\$ 960$ million of commercial mortgage loans as of December 31, 2016 and 2015, respectively, that are classified as Level 3 and reported at fair value. Commercial mortgage loans are primarily valued internally using discounted cash flow techniques, as described further under "-Fair Value of Financial Instruments." The primary unobservable input used is the spread to discount cash flows, which ranged from $1.19 \%$ to $2.90 \%$ ( $1.37 \%$ weighted average) as of December 31, 2016, and $1.49 \%$ to $4.81 \%$ ( $1.79 \%$ weighted average) as of December 31, 2015. In isolation, an increase (decrease) in the value of this input would result in a lower (higher) fair value measurement.

Valuation Process for Fair Value Measurements Categorized within Level 3-The Company has established an internal control infrastructure over the valuation of financial instruments that requires ongoing oversight by its various business groups. These management control functions are segregated from the trading and investing functions. For invested assets, the Company has established oversight teams, often in the form of pricing committees within each asset management group. The teams, which typically include representation from investment, accounting, operations, legal and other disciplines are responsible for overseeing and monitoring the pricing of the Company's investments and performing periodic due diligence reviews of independent pricing services. An actuarial valuation team oversees the valuation of living benefit features of the Company's variable annuity contracts.

The Company has also established policies and guidelines that require the establishment of valuation methodologies and consistent application of such methodologies. These policies and guidelines govern the use of inputs and price source hierarchies and provide controls around the valuation processes. These controls include appropriate review and analysis of investment prices against market activity or indicators of reasonableness, analysis of portfolio returns to corresponding benchmark returns, back-testing, review of bid-ask spreads to assess activity, approval of price source changes, price overrides, methodology changes and classification of fair value hierarchy levels. For living benefit features of the Company's variable annuity products, the actuarial valuation unit periodically tests contract input data and actuarial assumptions are reviewed at least annually, and updated based upon emerging experience, future expectations and other data, including any observable market data. The valuation policies and guidelines are reviewed and updated as appropriate.

Within the trading and investing functions, the Company has established policies and procedures that relate to the approval of all new transaction types, transaction pricing sources and fair value hierarchy coding within the financial reporting system. For variable annuity product changes or new launches of living benefit features, the actuarial valuation unit validates input logic and new product features and agrees new input data directly to source documents.

Changes in Level 3 Assets and Liabilities-The following tables provide summaries of the changes in fair values of Level 3 assets and liabilities as of the dates indicated, as well as the portion of gains or losses included in income attributable to unrealized gains or losses related to those assets and liabilities still held at the end of their respective periods.

|  | Year Ended December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fixed Maturities Available-For-Sale |  |  |  |  |  |
|  | $\begin{aligned} & \text { U.S. } \\ & \text { States } \end{aligned}$ | Foreign Government |  | U.S. <br> Corporate <br> Private <br> Securities | Foreign Public <br> Securitie | Foreign Corporate Private Securities |
|  | (in millions) |  |  |  |  |  |
| Fair Value, beginning of period | \$ 6 | \$123 | \$205 | \$ 694 | \$ 44 | \$ 279 |
| Total gains (losses) (realized/unrealized): |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |
| Realized investment gains (losses), net | 0 | 0 | 0 | (129) | 0 | (2) |
| Included in other comprehensive income (loss) | 0 | (3) | 17 | 64 | 4 | (9) |
| Net investment income | 0 | 0 | 1 | 9 | 0 | , |
| Purchases | 0 | 0 | 24 | 144 | 44 | 106 |
| Sales | 0 | 0 | (1) | (5) | (1) | (11) |
| Issuances . | 0 | 0 | 0 | 0 | 0 | 0 |
| Settlements . . . | (1) | 0 | (3) | (88) | (4) | (228) |
| Foreign currency translation | 0 | 3 | 2 |  | 3 | (1) |
| Other(1) | 0 | 0 | (13) | 0 | 13 | 0 |
| Transfers into Level 3(2) | 0 | 1 | 73 | 775 | 88 | 550 |
| Transfers out of Level 3(2) | 0 | 0 | (44) | (111) | (120) | (198) |
| Fair Value, end of period | \$ 5 | \$124 | \$261 | \$1,354 | \$ 71 | \$ 487 |
| Unrealized gains (losses) for assets still held(3): Included in earnings: |  |  |  |  |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 0 | \$ 0 | \$ (109) | \$ 0 | \$ (1) |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | Year Ended December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: |
|  | Fixed Maturities Available-For-Sale |  |  |
|  | AssetBacked(7) | $\begin{aligned} & \text { Commercial } \\ & \text { Mortgage- } \\ & \text { Backed } \end{aligned}$ | Residential MortgageBacked |
|  |  | (in millions) |  |
| Fair Value, beginning of period | \$ 4,048 | \$ 38 | \$183 |
| Total gains (losses) (realized/unrealized): |  |  |  |
| Included in earnings: |  |  |  |
| Realized investment gains (losses), net | 9 | 1 | 0 |
| Included in other comprehensive income (loss) | (15) | (7) | (1) |
| Net investment income | 13 | 1 | (1) |
| Purchases | 3,342 | 155 | 85 |
| Sales | (377) | (34) | (33) |
| Issuances | 0 | 0 | 0 |
| Settlements | (643) | (3) | (54) |
| Foreign currency translation | 17 | 0 | 18 |
| Other(1) | 159 | 0 | 0 |
| Transfers into Level 3(2) | 1,768 | 19 | 0 |
| Transfers out of Level 3(2) | $(3,977)$ | (156) | 0 |
| Fair Value, end of period | \$ 4,344 | \$ 14 | \$197 |
| Unrealized gains (losses) for assets still held(3): |  |  |  |
| Included in earnings: |  |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 0 | \$ 0 |


|  | Year Ended December 31, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trading Account Assets |  |  |  |  |  |  |
|  | Foreign Government | Corporate | AssetBacked(7) | $\begin{aligned} & \text { Commercial } \\ & \text { Mortgage- } \\ & \text { Backed } \end{aligned}$ | Residential MortgageBacked | Equity | All Other Activity <br> Activity |
|  | (in millions) |  |  |  |  |  |  |
| Fair Value, beginning of period | \$ 34 | \$ 203 | \$ 596 | \$ 3 | \$ 4 | \$ 589 | \$5 |
| Total gains (losses) (realized/unrealized): |  |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other income | (5) | (9) | (10) | (1) | (1) | 8 | 1 |
| Net investment income | 1 | 2 | 2 | , | , | 0 | 0 |
| Purchases | 201 | 11 | 185 | 0 | 0 | 20 | 0 |
| Sales | 0 | (3) | (49) | 0 | 0 | (65) | 0 |
| Issuances | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Settlements | (4) | (41) | (120) | 0 | (2) | (108) | 0 |
| Foreign currency translation | 0 | 0 | (2) | 0 | 0 | 31 | 0 |
| Other(1) | 0 | (15) | 141 | (1) | 1 | 14 | (5) |
| Transfers into Level 3(2) | 0 | 151 | 252 | ) | 0 | 28 | 0 |
| Transfers out of Level 3(2) | 0 | (111) | (666) | 0 | 0 | (30) | 0 |
| Fair Value, end of period | \$227 | \$ 188 | \$ 329 | \$ 1 | \$ 2 | \$ 487 | \$1 |
| Unrealized gains (losses) for assets still held(3): |  |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |  | \$0 |
| Other income | \$ (5) | \$ (10) | \$ (2) | \$(1) | \$(1) | \$ 3 | \$1 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements



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|  | Year Ended December 31, 2015 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trading Account Assets |  |  |  |  |  |  |
|  | Foreign Government | Corporate | Asset- <br> Backed(7) | Commercial MortgageBacked | Residential MortgageBacked | Equity | $\begin{gathered} \text { All } \\ \text { Other } \\ \text { Activity } \end{gathered}$ |
|  | (in millions) |  |  |  |  |  |  |
| Fair Value, beginning of period | \$21 | \$124 | \$ 393 | \$ 5 | \$ 7 | \$663 | \$ 7 |
| Total gains (losses) (realized/unrealized):Included in earnings: |  |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other income | 0 | (28) | (7) | 0 | 0 | (15) | (1) |
| Net investment income | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Purchases | 16 | 124 | 325 | 27 | 0 | 28 | 0 |
| Sales | 0 | (15) | (16) | (3) | 0 | (26) | (1) |
| Issuances | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Settlements . | (3) | (39) | (11) | (2) | (2) | (40) | 0 |
| Foreign currency translation | 0 | 0 | 0 | 0 | 0 | (13) | 0 |
| Other(1) | 0 | 0 | 0 | 0 | 0 | (8) | 0 |
| Transfers into Level 3(2) | 0 | 77 | 272 | 1 | 0 | 0 | 0 |
| Transfers out of Level 3(2) | 0 | (41) | (361) | (25) | (1) | 0 | 0 |
| Fair Value, end of period | \$34 | \$203 | \$ 596 | \$ 3 | \$ 4 | \$589 | \$ 5 |
| Unrealized gains (losses) for assets still held(3): Included in earnings: |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |  | \$ 0 |
| Other income | \$ 0 | \$ 9 | \$ (7) | \$ 0 | \$ 0 | \$ 6 | \$(1) |
|  |  |  |  | Year Ended December 31, 2015 |  |  |  |
|  |  |  |  | Equity <br> Securities <br> Available- <br> For-Sale | sOth <br> Long- | term ents(5) | Other Assets |
|  |  |  |  |  | (in milli |  |  |
| Fair Value, beginning of period |  |  |  | \$275 | \$1 |  | \$2 |
| Total gains (losses) (realized/unrealized): |  |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net |  |  |  | 15 |  |  | 0 |
| Other income |  |  |  | 0 |  | 0 | 0 |
| Included in other comprehensive income (loss) |  |  |  | 1 |  | 0 | 0 |
| Net investment income |  |  |  | 0 |  | 1) | 0 |
| Purchases |  |  |  | 31 |  |  | 0 |
| Sales |  |  |  | (48) |  | 2) | 0 |
| Issuances . |  |  |  | 0 |  | 0 | 5 |
| Settlements |  |  |  | (3) |  | 0 | 0 |
| Foreign currency translation |  |  |  | (7) |  | 0 | 0 |
| Other(1) |  |  |  | 0 |  | 0 | 0 |
| Transfers into Level 3(2) |  |  |  | 2 |  | 0 | 0 |
| Transfers out of Level 3(2) |  |  |  | 0 |  | 1) | 0 |
| Fair Value, end of period |  |  |  | \$266 | \$4 |  | \$7 |
| Unrealized gains (losses) for assets still held(3): |  |  |  |  |  |  |  |
| Included in earnings: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net |  |  |  | \$ (3) | \$1 |  | \$2 |
| Other income ........ |  | ......... |  | \$ 0 | \$ |  | \$0 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | Year Ended December 31, 2015 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Separate Account Assets(4)(5) | Future Policy Benefits | Other Liabilities | Notes <br> Issued by <br> Consolidated <br> VIEs |
|  | (in millions) |  |  |  |
| Fair Value, beginning of period | \$1,738 | \$(8,182) | \$(5) | \$(6,033) |
| Total gains (losses) (realized/unrealized): |  |  |  |  |
| Included in earnings: |  |  |  |  |
| Realized investment gains (losses), net | 0 | 717 | 1 | 287 |
| Other income | 0 | 0 | 0 | 146 |
| Interest credited to policyholders' account balances | (38) | 0 | 0 | 0 |
| Net investment income | 24 | 0 | 0 | 0 |
| Purchases | 1,060 | 0 | 0 | 0 |
| Sales ... | (175) | 0 | 0 | 0 |
| Issuances | 0 | (969) | 0 | $(2,997)$ |
| Settlements | (140) | 0 | 2 | 0 |
| Foreign currency translation | (5) | 0 | 0 | 0 |
| Other(1) ...... | 0 | 0 | 0 | 0 |
| Transfers into Level 3(2) | 51 | 0 | 0 | 0 |
| Transfers out of Level 3(2) | (520) | 0 | 0 | 0 |
| Fair Value, end of period | \$1,995 | \$ $(8,434)$ | \$(2) | \$ $(8,597)$ |
| Unrealized gains (losses) for assets/liabilities still held(3): |  |  |  |  |
| Included in earnings: |  |  |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 485 | \$ 1 | \$ 287 |
| Other income ..... | \$ 0 | \$ 0 | \$ 0 | \$ 146 |
| Interest credited to policyholders' account balances | \$ 318 | \$ 0 | \$ 0 | \$ 0 |

The following tables summarize the portion of changes in fair values of Level 3 assets and liabilities included in earnings and other comprehensive income for the year ended December 31, 2014, as well as the portion of gains or losses included in income attributable to unrealized gains or losses related to those assets and liabilities still held as of December 31, 2014.


## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | Year Ended December 31, 2014 |  |
| :---: | :---: | :---: |
|  | Equity Securities Available-For-Sale | Other Long-term Investments(5) |
|  | (in millions) |  |
| Total gains (losses) (realized/unrealized): |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | \$ 8 | \$(1) |
| Included in other comprehensive income (loss) | \$ 9 | \$ 0 |
| Unrealized gains (losses) for assets/liabilities still held(3): |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | \$(2) | \$(1) |

Year Ended December 31, 2014

| Year Ended December 31, 2014 |  |  |  |
| :---: | :---: | :---: | :---: |
| Separate | Future |  | Notes |
| Account | Policy | Other | Issued by |
| Assets(4)(5) | Benefits | Liabilities | VIEs |

Total gains (losses) (realized/unrealized): Included in earnings:

| Realized investment gains (losses), net | \$ 0 | \$(6,831) | \$2 | \$201 |
| :---: | :---: | :---: | :---: | :---: |
| Interest credited to policyholders' account balances | \$(11) | \$ 0 | \$0 | \$ 0 |
| Net investment income | \$ 24 | \$ 0 | \$0 | \$ 0 |

Unrealized gains (losses) for assets/liabilities still held(3):
Included in earnings:

| Realized investment gains (losses), net | \$ 0 | \$(6,853) | \$2 | \$201 |
| :---: | :---: | :---: | :---: | :---: |
| Interest credited to policyholders' account balances | \$ (8) | \$ 0 | \$0 | \$ 0 |

(1) Other as of December 31, 2016 primarily represents deconsolidations of certain previously consolidated collateralized loan obligations. Other as of December 31, 2015 primarily represents reclassifications of certain assets between reporting categories.
(2) Transfers into or out of Level 3 are generally reported as the value as of the beginning of the quarter in which the transfers occur for any such assets still held at the end of the quarter.
(3) Unrealized gains or losses related to assets still held at the end of the period do not include amortization or accretion of premiums and discounts.
(4) Separate account assets represent segregated funds that are invested for certain customers. Investment risks associated with market value changes are borne by the customers, except to the extent of minimum guarantees made by the Company with respect to certain accounts. Separate account liabilities are not included in the above table as they are reported at contract value and not fair value in the Company's Consolidated Statements of Financial Position.
(5) Prior period amounts have been reclassified to conform to current period presentation, including the adoption of ASU 2015-07.
(6) Amounts for the year ended December 31, 2015, have been revised to correct the previously reported amounts.
(7) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.

Transfers-Transfers into Level 3 are generally the result of unobservable inputs utilized within valuation methodologies and the use of indicative broker quotes for assets that were previously valued using observable inputs. Transfers out of Level 3 are generally due to the use of observable inputs in valuation methodologies as well as the availability of pricing service information for certain assets that the Company is able to validate.

## Derivative Fair Value Information

The following tables present the balance of derivative assets and liabilities measured at fair value on a recurring basis, as of the date indicated, by primary underlying. These tables include NPR and exclude embedded derivatives and associated reinsurance recoverables. The derivative assets and liabilities shown below are included in "Trading account assets-All Other

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Activity," "Other long-term investments" or "Other liabilities" in the tables presented above, under the headings "Assets and Liabilities by Hierarchy Level" and "Changes in Level 3 Assets and Liabilities."

|  | As of December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | $\underline{\text { Level } 2}$ | $\frac{\text { Level } 3}{\text { (in millio }}$ | Netting(1) | Total |  |
|  |  |  |  |  |  |  |
| Derivative assets: |  |  |  |  |  |  |
| Interest Rate | \$55 | \$ 9,269 | \$6 |  |  | 9,330 |
| Currency | 0 | 375 | 0 |  |  | 375 |
| Credit | 0 | 1 | 0 |  |  | 1 |
| Currency/Interest Rate | 0 | 3,174 | 0 |  |  | 3,174 |
| Equity | 0 | 203 | 0 |  |  | 203 |
| Commodity | 0 | 0 | 0 |  |  | 0 |
| Netting(1) |  |  |  | $(11,716)$ |  | $(11,716)$ |
| Total derivative assets | \$55 | \$13,022 | \$6 | \$(11,716) |  | 1,367 |
| Derivative liabilities: |  |  |  |  |  |  |
| Interest Rate | \$ 1 | \$ 4,515 | \$2 |  |  | 4,518 |
| Currency | 0 | 893 | 0 |  |  | 893 |
| Credit | 0 | 25 | 0 |  |  | 25 |
| Currency/Interest Rate | 0 | 365 | 0 |  |  | 365 |
| Equity | 6 | 483 | 0 |  |  | 489 |
| Commodity | 0 | 0 | 0 |  |  | 0 |
| Netting(1) |  |  |  | $(5,945)$ |  | $(5,945)$ |
| Total derivative liabilities | \$ 7 | \$ 6,281 | \$2 | \$ $(5,945)$ |  | 345 |
|  |  | As of | December | 31, 2015 |  |  |
|  | Level 1 | $\underline{\text { Level } 2}$ | Level 3 | Netting(1) |  | Total |
|  |  |  | (in millio |  |  |  |
| Derivative assets: |  |  |  |  |  |  |
| Interest Rate | \$11 | \$10,561 | \$ 7 |  |  | 10,579 |
| Currency | 0 | 318 | 0 |  |  | 318 |
| Credit | 0 | 3 | 0 |  |  | 3 |
| Currency/Interest Rate | 0 | 2,995 | 0 |  |  | 2,995 |
| Equity | 4 | 254 | 32 |  |  | 290 |
| Commodity | 0 | 0 | 0 |  |  | 0 |
| Netting(1) |  |  |  | $(11,457)$ |  | $(11,457)$ |
| Total derivative assets | \$15 | \$14,131 | \$39 | \$(11,457) |  | 2,728 |
| Derivative liabilities: |  |  |  |  |  |  |
| Interest Rate | \$ 3 | \$ 4,573 | \$ 2 |  |  | 4,578 |
| Currency | 0 | 114 | 0 |  |  | 114 |
| Credit | 0 | 53 | 0 |  |  | 53 |
| Currency/Interest Rate | 0 | 244 | 0 |  |  | 244 |
| Equity | 0 | 327 | 0 |  |  | 327 |
| Commodity | 0 | 0 | 0 |  |  | 0 |
| Netting(1) |  |  |  | $(5,276)$ |  | $(5,276)$ |
| Total derivative liabilities | \$ 3 | \$ 5,311 | \$ 2 | \$ $(5,276)$ |  | 40 |

(1) "Netting" amounts represent cash collateral and the impact of offsetting asset and liability positions held with the same counterparty.

Changes in Level 3 derivative assets and liabilities-The following tables provide a summary of the changes in fair value of Level 3 derivative assets and liabilities for the year ended December 31, 2016, as well as the portion of gains or losses included in income

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

for the year ended December 31, 2016, attributable to unrealized gains or losses related to those assets and liabilities still held at December 31, 2016.

|  | Year Ended Decen | lber 31, 2016 |
| :---: | :---: | :---: |
|  | Derivative AssetsEquity | Derivative AssetsInterest Rate |
|  | (in millio | ns) |
| Fair Value, beginning of period | \$ 32 | \$ 5 |
| Total gains (losses) (realized/unrealized): |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | 0 | (1) |
| Other income | 0 | 0 |
| Purchases | 0 | 0 |
| Sales | 0 | 0 |
| Issuances | 0 | 0 |
| Settlements | 0 | 0 |
| Other(1) | (32) | 0 |
| Transfers into Level 3(2) | 0 | 0 |
| Transfers out of Level 3(2) | 0 | 0 |
| Fair Value, end of period | \$ 0 | \$ 4 |
| Unrealized gains (losses) for the period relating to thos Included in earnings: |  |  |
| Realized investment gains (losses), net | \$ 0 | \$ 0 |
| Other income | \$ 0 | \$ 0 |
|  | Year Ended Decen | lber 31, 2015 |
|  | Derivative AssetsEquity | Derivative AssetsInterest Rate |
|  | (in milli |  |
| Fair Value, beginning of period | \$ 6 | \$3 |
| Total gains (losses) (realized/unrealized): |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | 20 | 2 |
| Other income | 0 | 0 |
| Purchases | 9 | 0 |
| Sales | (2) | 0 |
| Issuances | 0 | 0 |
| Settlements | 0 | 0 |
| Other | 0 | 0 |
| Transfers into Level 3(2) | 0 | 0 |
| Transfers out of Level 3(2) | (1) | 0 |
| Fair Value, end of period | \$32 | \$5 |
| Unrealized gains (losses) for the period relating to thos |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | \$20 | \$2 |
| Other income | \$ 0 | \$0 |
|  | Year Ended Decen | nber 31, 2014 |
|  | Derivative AssetsEquity | Derivative AssetsInterest Rate |
|  | (in millio | ns) |
| Total gains (losses) (realized/unrealized): |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | \$1 | \$0 |
| Other income | \$0 | \$0 |
| Unrealized gains (losses) for the period relating to thos |  |  |
| Included in earnings: |  |  |
| Realized investment gains (losses), net | \$1 | \$0 |
| Other income . . | \$0 | \$0 |

(1) Primarily related to private warrants reclassified from derivatives to trading securities.
(2) Transfers into or out of Level 3 are generally reported as the value as of the beginning of the quarter in which the transfer occurs.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

Nonrecurring Fair Value Measurements-The following table represents information for assets measured at fair value on a nonrecurring basis. The estimated fair values were classified as Level 3 in the valuation hierarchy.

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Commercial mortgage loans(1): |  |  |  |
| Carrying value as of period end | \$ 47 | \$ 0 | \$ 0 |
| Realized investment gains (losses) net | \$ (5) | \$ 0 | \$ 0 |
| Mortgage servicing rights(2): |  |  |  |
| Carrying value as of period end | \$ 84 | \$ 90 | \$ 89 |
| Realized investment gains (losses) net . | \$ (1) | \$ (7) | \$ 7 |
| Cost method investments(3): |  |  |  |
| Carrying value as of period end | \$284 | \$ 239 | \$102 |
| Realized investment gains (losses) net . | \$ (85) | \$(123) | \$ (21) |

(1) Commercial mortgage loans are valued based on discounted cash flows utilizing market rates or the fair value of the underlying real estate collateral.
(2) Mortgage servicing rights are revalued based on internal models which utilize inputs. The fair value for mortgage servicing rights is determined using a discounted cash flow model incorporating assumptions for servicing revenues, adjusted for expected prepayments, delinquency rates, escrow deposit income and estimated loan servicing expenses.
(3) For cost method impairments, the methodologies utilized are primarily discounted cash flow and, where appropriate, valuations provided by the general partners taking into consideration investment-related expenses.

## Fair Value Option

The fair value option provides the Company an option to elect fair value as an alternative measurement for selected financial assets and financial liabilities not otherwise reported at fair value. Such elections have been made by the Company to help mitigate volatility in earnings that results from different measurement attributes. Electing the fair value option also allows the Company to achieve consistent accounting for certain assets and liabilities.

The following table presents information regarding changes in fair values recorded in earnings for commercial mortgage and other loans, other long-term investments and notes issued by consolidated VIEs, where the fair value option has been elected.

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Assets: |  |  |  |
| Commercial mortgage and other loans: |  |  |  |
| Changes in instrument-specific credit risk | \$ 0 | \$ 0 | \$ 0 |
| Other changes in fair value | 0 | 0 | 0 |
| Other long-term investments: |  |  |  |
| Changes in fair value | 58 | 2 | 54 |
| Liabilities: |  |  |  |
| Notes issued by consolidated VIEs: |  |  |  |
| Changes in fair value | \$37 | \$(434) | \$(201) |

Changes in fair value are reflected in "Realized investment gains (losses), net" for commercial mortgage and other loans and "Other income" for other long-term investments and notes issued by consolidated VIEs. Changes in fair value due to instrument-specific credit risk are estimated based on changes in credit spreads and quality ratings for the period reported.

Interest income on commercial mortgage and other loans is included in net investment income. For the years ended December 31, 2016, 2015 and 2014, the Company recorded $\$ 10$ million, $\$ 11$ million and $\$ 11$ million of interest income, respectively, on fair value option loans. Interest income on these loans is recorded based on the effective interest rates as determined at the closing of the loan.

The fair values and aggregate contractual principal amounts of commercial mortgage and other loans, for which the fair value option has been elected, were $\$ 519$ million and $\$ 508$ million, respectively, as of December 31, 2016, and $\$ 274$ million and $\$ 270$ million, respectively, as December 31, 2015. As of December 31, 2016, for loans for which the fair value option has been elected, there were no loans in non-accrual status and none of the loans are more than 90 days past due and still accruing.

The fair value of other long-term investments was $\$ 1,556$ million and $\$ 1,322$ million as of December 31, 2016 and 2015, respectively.
The fair values and aggregate contractual principal amounts of limited recourse notes issued by consolidated VIEs, for which the fair value option has been elected at issuance, were $\$ 1,839$ million and $\$ 1,886$ million, respectively, as of December 31, 2016, and $\$ 8,597$ million and $\$ 9,186$ million, respectively, as of December 31, 2015. Interest expense recorded for these liabilities was $\$ 120$ million, $\$ 351$ million and $\$ 200$ million for the years ended December 31, 2016, 2015 and 2014, respectively.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Fair Value of Financial Instruments

The table below presents the carrying amount and fair value by fair value hierarchy level of certain financial instruments that are not reported at fair value. The financial instruments presented below are reported at carrying value on the Company's Consolidated Statements of Financial Position; however, in some cases, as described below, the carrying amount equals or approximates fair value.

|  | December 31, 2016(1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value |  |  |  |  | $\begin{gathered} \hline \text { Carrying } \\ \text { Amount(2) } \\ \hline \end{gathered}$ |
|  | Level 1 | Level 2 |  | Level 3 | Total | Total |
|  |  |  |  | (in millio |  |  |
| Assets: |  |  |  |  |  |  |
| Fixed maturities, held-to-maturity(3) | \$ 0 |  | 1,526 | \$ 998 | \$ 2,524 | \$ 2,144 |
| Trading account assets | 0 |  | 150 | 0 | 150 | 150 |
| Commercial mortgage and other loans | 0 |  | 139 | 53,625 | 53,764 | 52,260 |
| Policy loans | 1 |  | 0 | 11,754 | 11,755 | 11,755 |
| Short-term investments | 0 |  | 326 | 0 | 326 | 326 |
| Cash and cash equivalents | 4,945 |  | 876 | 0 | 5,821 | 5,821 |
| Accrued investment income | 0 |  | 3,204 | 0 | 3,204 | 3,204 |
| Other assets | 54 |  | 1,976 | 658 | 2,688 | 2,688 |
| Total assets | \$5,000 |  | 8,197 | \$67,035 | \$ 80,232 | \$ 78,348 |
| Liabilities: |  |  |  |  |  |  |
| Policyholders' account balances-investment contracts | \$ 0 |  | 41,653 | \$58,392 | \$100,045 | \$ 99,719 |
| Securities sold under agreements to repurchase | 0 |  | 7,606 | 0 | 7,606 | 7,606 |
| Cash collateral for loaned securities | 0 |  | 4,333 | 0 | 4,333 | 4,333 |
| Short-term debt | 0 |  | 1,077 | 73 | 1,150 | 1,133 |
| Long-term debt(4) | 1,267 |  | 15,705 | 2,957 | 19,929 | 18,041 |
| Other liabilities . | 0 |  | 6,540 | 696 | 7,236 | 7,236 |
| Separate account liabilities-investment contracts | 0 |  | 71,010 | 27,578 | 98,588 | 98,588 |
| Total liabilities | \$1,267 |  | 147,924 | \$89,696 | \$238,887 | \$236,656 |


|  | December 31, 2015(1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value |  |  |  | Carrying <br> Amount(2) <br> Total |
|  | Level 1 | Level 2 | Level 3 | Total |  |
|  | (in millions) |  |  |  |  |
| Assets: |  |  |  |  |  |
| Fixed maturities, held-to-maturity(3) | \$ 0 | \$ 1,543 | \$ 1,081 | \$ 2,624 | \$ 2,308 |
| Commercial mortgage and other loans | 0 | 533 | 51,046 | 51,579 | 50,285 |
| Policy loans | 0 | 0 | 11,657 | 11,657 | 11,657 |
| Short-term investments | 0 | 617 | 1 | 618 | 618 |
| Cash and cash equivalents | 2,832 | 572 | 0 | 3,404 | 3,404 |
| Accrued investment income | 0 | 3,110 | 0 | 3,110 | 3,110 |
| Other assets | 136 | 2,334 | 652 | 3,122 | 3,122 |
| Total assets | \$2,968 | \$ 8,709 | \$64,437 | \$ 76,114 | \$ 74,504 |
| Liabilities: |  |  |  |  |  |
| Policyholders' account balances-investment contracts | \$ 0 | \$ 39,314 | \$54,957 | \$ 94,271 | \$ 93,937 |
| Securities sold under agreements to repurchase . . . . . . | 0 | 7,882 | 0 | 7,882 | 7,882 |
| Cash collateral for loaned securities | 0 | 3,496 | 0 | 3,496 | 3,496 |
| Short-term debt | 0 | 1,221 | 0 | 1,221 | 1,216 |
| Long-term debt(4)(5) | 1,328 | 16,540 | 3,433 | 21,301 | 19,594 |
| Other liabilities . . . . | 0 | 5,344 | 695 | 6,039 | 6,039 |
| Separate account liabilities-investment contracts | 0 | 69,978 | 32,267 | 102,245 | 102,245 |
| Total liabilities | \$1,328 | \$143,775 | \$91,352 | \$236,455 | \$234,409 |

(1) Effective January 1, 2016, the Company adopted new accounting guidance (ASU 2015-07, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share or Its Equivalent (Topic 820)), which removes the requirement to categorize within the fair value hierarchy all investments measured at net asset value per share (or its equivalent) as a practical expedient. As a result of the adoption of this new guidance, certain other long-term investments are no longer classified in the fair value hierarchy. The guidance was required to be applied retrospectively, and therefore,

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

prior period amounts have been conformed to the current period presentation. At December 31, 2016 and 2015, the fair values of these cost method investments were $\$ 1,514$ million and $\$ 1,653$ million, respectively, which had been previously classified in level 3 at December 31, 2015. The carrying value of these investments were $\$ 1,478$ million and $\$ 1,563$ million as of December 31, 2016 and 2015, respectively.
(2) Carrying values presented herein differ from those in the Company's Consolidated Statements of Financial Position because certain items within the respective financial statement captions are not considered financial instruments or out of scope under authoritative guidance relating to disclosures of the fair value of financial instruments. Financial statement captions excluded from the above table are not considered financial instruments.
(3) As of December 31, 2016, excludes notes with both fair value and carrying amount of $\$ 4,403$ million. As of December 31, 2015, excludes notes with fair value and carrying amount of $\$ 4,081$ million and $\$ 3,850$ million, respectively. These amounts have been offset with the associated payables under a netting agreement.
(4) As of December 31, 2016, includes notes with both fair value and carrying amount of $\$ 5,859$ million. As of December 31, 2015, includes notes with fair value and carrying amount of $\$ 5,120$ million and $\$ 4,889$ million, respectively. These amounts have been offset with the associated receivables under a netting agreement.
(5) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-03.

The fair values presented above have been determined by using available market information and by applying market valuation methodologies, as described in more detail below.

## Fixed Maturities, Held-to-Maturity

The fair values of public fixed maturity securities are generally based on prices from third-party pricing services, which are reviewed for reasonableness; however, for certain public fixed maturity securities and investments in private placement fixed maturity securities, this information is either not available or not reliable. For these public fixed maturity securities, the fair value is based on indicative broker quotes, if available, or determined using a discounted cash flow model or other internally-developed models. For private fixed maturities, fair value is determined using a discounted cash flow model. In determining the fair value of certain fixed maturity securities, the discounted cash flow model may also use unobservable inputs, which reflect the Company's own assumptions about the inputs market participants would use in pricing the security.

## Commercial Mortgage and Other Loans

The fair value of most commercial mortgage loans is based upon the present value of the expected future cash flows discounted at the appropriate U.S. Treasury rate or foreign government bond rate (for non-U.S. dollar-denominated loans) plus an appropriate credit spread for loans of similar quality, average life and currency. The quality ratings for these loans, a primary determinant of the credit spreads and a significant component of the pricing process, are based on an internally-developed methodology. Certain commercial mortgage loans are valued incorporating other factors, including the terms of the loans, the principal exit strategies for the loans, prevailing interest rates and credit risk.

## Policy Loans

The Company's valuation technique for policy loans is to discount cash flows at the current policy loan coupon rate. Policy loans are fully collateralized by the cash surrender value of underlying insurance policies. As a result, the carrying value of the policy loans approximates the fair value.

## Short-Term Investments, Cash and Cash Equivalents, Accrued Investment Income and Other Assets

The Company believes that due to the short-term nature of certain assets, the carrying value approximates fair value. These assets include: certain short-term investments which are not securities, are recorded at amortized cost and include quality loans; cash and cash equivalent instruments; accrued investment income; and other assets that meet the definition of financial instruments, including receivables, such as reinsurance recoverables, unsettled trades, accounts receivable and restricted cash.

## Policyholders' Account Balances—Investment Contracts

Only the portion of policyholders' account balances related to products that are investment contracts (those without significant mortality or morbidity risk) are reflected in the table above. For fixed deferred annuities, single premium endowments, payout annuities and other similar contracts without life contingencies, fair values are generally derived using discounted projected cash flows based on interest rates that are representative of the Company's financial strength ratings, and hence reflect the Company's own NPR. For guaranteed investment contracts, funding agreements, structured settlements without life contingencies and other similar products, fair values are generally derived using discounted projected cash flows based on interest rates being offered for similar contracts with maturities consistent with those of the contracts being valued. For those balances that can be withdrawn by the customer at any time without prior notice or penalty, the fair value is the amount estimated to be payable to the customer as of the reporting date, which is generally the carrying value. For defined contribution and defined benefit contracts and certain other products, the fair value is the market value of the assets supporting the liabilities.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Securities Sold Under Agreements to Repurchase

The Company receives collateral for selling securities under agreements to repurchase, or pledges collateral under agreements to resell. Repurchase and resale agreements are also generally short-term in nature and, therefore, the carrying amounts of these instruments approximate fair value.

## Cash Collateral for Loaned Securities

Cash collateral for loaned securities represents the collateral received or paid in connection with loaning or borrowing securities, similar to the securities sold under agreement to repurchase above. Due to the short-term nature of these transactions, the carrying value approximates fair value.

## Debt

The fair value of short-term and long-term debt, as well as notes issued by consolidated VIEs, is generally determined by either prices obtained from independent pricing services, which are validated by the Company, or discounted cash flow models. With the exception of the notes issued by consolidated VIEs for which recourse is limited to the assets of the respective VIE and does not extend to the general credit of the Company, the fair values of these instruments consider the Company's own NPR. Discounted cash flow models predominately use market observable inputs such as the borrowing rates currently available to the Company for debt and financial instruments with similar terms and remaining maturities. For commercial paper issuances and other debt with a maturity of less than 90 days, the carrying value approximates fair value.

## Other Liabilities

Other liabilities are primarily payables, such as reinsurance payables, unsettled trades, drafts and accrued expense payables. Due to the short-term until settlement of most of these liabilities, the Company believes that carrying value approximates fair value.

## Separate Account Liabilities—Investment Contracts

Only the portion of separate account liabilities related to products that are investment contracts are reflected in the table above. Separate account liabilities are recorded at the amount credited to the contractholder, which reflects the change in fair value of the corresponding separate account assets including contractholder deposits less withdrawals and fees; therefore, carrying value approximates fair value.

## 21. DERIVATIVE INSTRUMENTS

## Types of Derivative Instruments and Derivative Strategies

## Interest Rate Contracts

Interest rate swaps, options and futures are used by the Company to reduce risks from changes in interest rates, manage interest rate exposures arising from mismatches between assets and liabilities (including duration mismatches) and to hedge against changes in the value of assets it owns or anticipates acquiring or selling.

Swaps may be attributed to specific assets or liabilities or may be used on a portfolio basis. Under interest rate swaps, the Company agrees with counterparties to exchange, at specified intervals, the difference between fixed-rate and floating-rate interest amounts calculated by reference to an agreed upon notional principal amount.

The Company also uses swaptions, interest rate caps and interest rate floors to manage interest rate risk. A swaption is an option to enter into a swap with a forward starting effective date. The Company pays a premium for purchased swaptions and receives a premium for written swaptions. In an interest rate cap, the buyer receives payments at the end of each period in which the interest rate exceeds the agreed strike price. Similarly, in an interest rate floor, the buyer receives payments at the end of each period in which the interest rate is below the agreed strike price. Swaptions and interest rate caps and floors are included in interest rate options.

In exchange-traded interest rate futures transactions, the Company purchases or sells a specified number of contracts, the values of which are determined by the values of underlying referenced investments, and posts variation margin on a daily basis in an amount equal to the difference in the daily market values of those contracts. The Company enters into exchange-traded futures with regulated futures commission's merchants who are members of a trading exchange.

## Equity Contracts

Equity index options are contracts which will settle in cash based on differentials in the underlying indices at the time of exercise and the strike price. The Company uses combinations of purchases and sales of equity index options to hedge the effects of adverse changes in equity indices within a predetermined range.

Total return swaps are contracts whereby the Company agrees with counterparties to exchange, at specified intervals, the difference between the return on an asset (or market index) and LIBOR plus an associated funding spread based on a notional amount. The Company generally uses total return swaps to hedge the effect of adverse changes in equity indices.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Foreign Exchange Contracts

Currency derivatives, including currency futures, options, forwards and swaps, are used by the Company to reduce risks from changes in currency exchange rates with respect to investments denominated in foreign currencies that the Company either holds or intends to acquire or sell, and to hedge the currency risk associated with net investments in foreign operations and anticipated earnings of its foreign operations.

Under currency forwards, the Company agrees with counterparties to deliver a specified amount of an identified currency at a specified future date. Typically, the price is agreed upon at the time of the contract and payment for such a contract is made at the specified future date. As noted above, the Company uses currency forwards to mitigate the impact of changes in currency exchange rates on U.S. dollar-equivalent earnings generated by certain of its non-U.S. businesses, primarily its international insurance and investment operations. The Company executes forward sales of the hedged currency in exchange for U.S. dollars at a specified exchange rate. The maturities of these forwards correspond with the future periods in which the non-U.S. dollar-denominated earnings are expected to be generated. These earnings hedges do not qualify for hedge accounting.

Under currency swaps, the Company agrees with counterparties to exchange, at specified intervals, the difference between one currency and another at an exchange rate and calculated by reference to an agreed principal amount. Generally, the principal amount of each currency is exchanged at the beginning and termination of the currency swap by each party.

## Credit Contracts

The Company writes credit default swaps for which it receives a premium to insure credit risk. These are used by the Company to enhance the return on the Company's investment portfolio by creating credit exposure similar to an investment in public fixed maturity cash instruments. With these derivatives the Company sells credit protection on a single name reference, or certain index reference, and in return receives a quarterly premium. This premium or credit spread generally corresponds to the difference between the yield on the referenced names (or an index's referenced names) public fixed maturity cash instruments and swap rates, at the time the agreement is executed. If there is an event of default by the referenced name or one of the referenced names in the index, as defined by the agreement, then the Company is obligated to pay the referenced amount of the contract to the counterparty and receive in return the referenced defaulted security or similar security or (in the case of a credit default index) pay the referenced amount less the auction recovery rate. See credit derivatives written section for further discussion of guarantees. In addition to selling credit protection, the Company has purchased credit protection using credit derivatives in order to hedge specific credit exposures in the Company's investment portfolio.

## Other Contracts

TBAs. The Company uses TBA forward contracts to gain exposure to the investment risk and return of mortgage-backed securities. TBA transactions can help the Company enhance the return on its investment portfolio, and can provide a more liquid and cost effective method of achieving these goals than purchasing or selling individual mortgage-backed pools. Typically, the price is agreed upon at the time of the contract and payment for such a contract is made at a specified future date. Additionally, pursuant to the Company's mortgage dollar roll program, TBAs or mortgage-backed securities are transferred to counterparties with a corresponding agreement to repurchase them at a future date. These transactions do not qualify as secured borrowings and are accounted for as derivatives.

Loan Commitments. In its mortgage operations, the Company enters into commitments to fund commercial mortgage loans at specified interest rates and other applicable terms within specified periods of time. These commitments are legally binding agreements to extend credit to a counterparty. Loan commitments for loans that will be held for sale are recognized as derivatives and recorded at fair value. The determination of the fair value of loan commitments accounted for as derivatives considers various factors including, among others, terms of the related loan, the intended exit strategy for the loans based upon either securitization valuation models or investor purchase commitments, prevailing interest rates, origination income or expense, and the value of service rights. Loan commitments that relate to the origination of mortgage loans that will be held for investment are not accounted for as derivatives and accordingly are not recognized in the Company's financial statements. See Note 23 for additional information.

Embedded Derivatives. The Company sells variable annuity products, which may include guaranteed benefit features that are accounted for as embedded derivatives. These embedded derivatives are marked to market through "Realized investment gains (losses), net" based on the change in value of the underlying contractual guarantees, which are determined using valuation models. The Company maintains a portfolio of derivative instruments that is intended to offset certain risks related to the above products' features. The derivatives may include, but are not limited to equity options, total return swaps, interest rate swaptions, caps, floors and other instruments.

Synthetic Guarantees. The Company sells synthetic Guaranteed Investment Contracts ("GICs"), through both full service and investment-only sales channels, to investment vehicles primarily used by qualified defined contribution pension plans. The synthetic GICs are issued in respect of assets that are owned by the trustees of such plans, who invest the assets according to the contract terms agreed to with the Company. The contracts establish participant balances and credit interest thereon. The participant balances are supported by the underlying assets. In connection with certain participant-initiated withdrawals, the contract guarantees that after all underlying assets are liquidated, any remaining participant balances will be paid by the Company. Under U.S. GAAP, these contracts are accounted for as derivatives and recorded at fair value.

The table below provides a summary of the gross notional amount and fair value of derivatives contracts by the primary underlying, excluding embedded derivatives and associated reinsurance recoverables. Many derivative instruments contain multiple underlyings. The

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

fair value amounts below represent the gross fair value of derivative contracts prior to taking into account the netting effects of master netting agreements, cash collateral held with the same counterparty and NPR. This netting impact results in total derivative assets of $\$ 1,367$ million and $\$ 2,728$ million as of December 31, 2016 and 2015, respectively, and total derivative liabilities of $\$ 345$ million and $\$ 40$ million as of December 31, 2016 and 2015, respectively, reflected in the Consolidated Statements of Financial Position.

(1) Notional amounts are presented on a gross basis and include derivatives used to offset existing positions.
(2) Based on notional amounts, most of the Company's derivatives do not qualify for hedge accounting as follows: i) derivatives that economically hedge embedded derivatives do not qualify for hedge accounting because changes in the fair value of the embedded derivatives are already recorded in net income, ii) derivatives that are utilized as macro hedges of the Company's exposure to various risks typically do not qualify for hedge accounting because they do not meet the criteria required under portfolio hedge accounting rules, and iii) synthetic GICs, which are product standalone derivatives, do not qualify as hedging instruments under hedge accounting rules.
(3) Excludes embedded derivatives and associated reinsurance recoverables which contain multiple underlyings. The fair value of these embedded derivatives was a net liability of $\$ 8,252$ million and $\$ 8,408$ million as of December 31, 2016, and 2015, respectively, primarily included in "Future policy benefits."

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Offsetting Assets and Liabilities

The following table presents recognized derivative instruments (excluding embedded derivatives and associated reinsurance recoverables), and repurchase and reverse repurchase agreements that are offset in the Consolidated Statements of Financial Position, and/ or are subject to an enforceable master netting arrangement or similar agreement, irrespective of whether they are offset in the Consolidated Statements of Financial Position.

|  | December 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross <br> Amounts of Recognized Financial Instruments | Gross <br> Amounts Offset in the Statements of Financial Position | Net Amounts Presented in the Statements of Financial Position | Financial Instruments/ Collateral(1) | Net <br> Amount |
|  |  |  | (in millions) |  |  |
| Offsetting of Financial Assets: |  |  |  |  |  |
| Derivatives(1) | \$12,987 | \$(11,716) | \$1,271 | \$ (399) | \$872 |
| Securities purchased under agreement to resell | 1,016 | 0 | 1,016 | $(1,016)$ | 0 |
| Total Assets | \$14,003 | \$(11,716) | \$2,287 | \$(1,415) | \$872 |
| Offsetting of Financial Liabilities: |  |  |  |  |  |
| Derivatives(1) | \$ 6,281 | \$ $(5,945)$ | \$ 336 | \$ (299) | \$ 37 |
| Securities sold under agreement to repurchase | 7,606 | 0 | 7,606 | $(7,606)$ | 0 |
| Total Liabilities | \$13,887 | \$ $(5,945)$ | \$7,942 | \$(7,905) | \$ 37 |
|  | December 31, 2015 |  |  |  |  |
|  | Gross <br> Amounts of Recognized Financial Instruments | Gross Amounts Offset in the Statements of Financial Position | Net Amounts Presented in the Statements of Financial Position | Financial Instruments/ Collateral(1) | Net <br> Amount |
|  |  |  | (in millions) |  |  |
| Offsetting of Financial Assets: |  |  |  |  |  |
| Derivatives(1) | \$14,028 | \$(11,457) | \$2,571 | \$(1,296) | \$1,275 |
| Securities purchased under agreement to resell | 776 | 0 | 776 | (776) | 0 |
| Total Assets | \$14,804 | \$(11,457) | \$3,347 | \$(2,072) | \$1,275 |
| Offsetting of Financial Liabilities: |  |  |  |  |  |
| Derivatives(1) | \$ 5,310 | \$ $(5,276)$ | \$ 34 | \$ (14) | \$ 20 |
| Securities sold under agreement to repurchase | 7,882 | 0 | 7,882 | $(7,882)$ | 0 |
| Total Liabilities | \$13,192 | \$ $(5,276)$ | \$7,916 | \$(7,896) | \$ 20 |

(1) Amounts exclude the excess of collateral received/pledged from/to the counterparty.

For information regarding the rights of offset associated with the derivative assets and liabilities in the table above see "-Counterparty Credit Risk" below. For securities purchased under agreements to resell and securities sold under agreements to repurchase, the Company monitors the value of the securities and maintains collateral, as appropriate, to protect against credit exposure. Where the Company has entered into repurchase and resale agreements with the same counterparty, in the event of default, the Company would generally be permitted to exercise rights of offset. See Note 2 for additional information.

## Cash Flow, Fair Value and Net Investment Hedges

The primary derivative instruments used by the Company in its fair value, cash flow and net investment hedge accounting relationships are interest rate swaps, currency swaps and currency forwards. These instruments are only designated for hedge accounting in instances where the appropriate criteria are met. The Company does not use futures, options, credit, equity or embedded derivatives in any of its fair value, cash flow or net investment hedge accounting relationships.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

The following table provides the financial statement classification and impact of derivatives used in qualifying and non-qualifying hedge relationships, excluding the offset of the hedged item in an effective hedge relationship.

|  | Year Ended December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Realized <br> Investment <br> Gains <br> (Losses) | $\begin{gathered} \text { Net } \\ \text { Investment } \\ \text { Income } \end{gathered}$ | Other Income | Interest Expense | Interest Credited To Policyholders Account Balances | AOCI(1) |
|  | (in millions) |  |  |  |  |  |
| Derivatives Designated as Hedge Accounting Instruments: <br> Fair value hedges |  |  |  |  |  |  |
| Interest Rate . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | \$ 26 | \$(31) | \$ 0 | \$ 0 | \$0 | \$ 0 |
| Currency | 21 | (1) | 0 | 0 | 0 | 0 |
| Total fair value hedges | 47 | (32) | 0 | 0 | 0 | 0 |
| Cash flow hedges |  |  |  |  |  |  |
| Interest Rate | 0 | 0 | 0 | (5) | 0 | (1) |
| Currency/Interest Rate | 0 | 123 | 269 | ) | 0 | 152 |
| Total cash flow hedges | 0 | 123 | 269 | (5) | 0 | 151 |
| Net investment hedges |  |  |  |  |  |  |
| Currency(2) ... | 5 | 0 | 0 | 0 | 0 | (5) |
| Currency/Interest Rate | 0 | 0 | 0 | 0 | 0 | 0 |
| Total net investment hedges | 5 | 0 | 0 | 0 | 0 | (5) |
| Derivatives Not Qualifying as Hedge Accounting Instruments: |  |  |  |  |  |  |
| Interest Rate | 1,564 | 0 | 0 | 0 | 0 | 0 |
| Currency | 463 | 0 | 1 | 0 | 0 | 0 |
| Currency/Interest Rate | 10 | 0 | 3 | 0 | 0 | 0 |
| Credit | 32 | 0 | 0 | 0 | 0 | 0 |
| Equity | $(2,171)$ | 0 | 0 | 0 | 0 | 0 |
| Commodity | (1) | 0 | 0 | 0 | 0 | 0 |
| Embedded Derivatives | 1,260 | 0 | 0 | 0 | 0 | 0 |
| Total non-qualifying hedges | 1,157 | 0 | 4 | 0 | 0 | 0 |
| Total | \$ 1,209 | \$ 91 | \$273 | \$(5) | \$0 | \$146 |



## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | Year Ended December 31, 2014 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Realized Investment Gains (Losses) | Net Investment Income | Other Income | Interest <br> Expense | Interest Credited <br> To Policyholders' Account Balances | $\underline{\mathrm{AOCI}}(1)$ |
|  | (in millions) |  |  |  |  |  |
| Derivatives Designated as Hedge Accounting Instruments: Fair value hedges |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Interest Rate | \$ (4) | \$(57) | \$ 0 | \$ 0 | \$2 | \$ 0 |
| Currency | (9) | (1) | 0 | 0 | 0 | 0 |
| Total fair value hedges | (13) | (58) | 0 | 0 | 2 | 0 |
| Cash flow hedges |  |  |  |  |  |  |
| Interest Rate | 0 | 0 | 0 | (22) | 0 | 38 |
| Currency/Interest Rate | 0 | 7 | 67 | 0 | 0 | 614 |
| Total cash flow hedges | 0 | 7 | 67 | (22) | 0 | 652 |
| Net investment hedges |  |  |  |  |  |  |
| Currency | 0 | 0 | 0 | 0 | 0 | 17 |
| Currency/Interest Rate | 0 | 0 | 0 | 0 | 0 | 128 |
| Total net investment hedges | 0 | 0 | 0 | 0 | 0 | 145 |
| Derivatives Not Qualifying as Hedge Accounting Instruments: |  |  |  |  |  |  |
| Interest Rate | 7,623 | 0 | 0 | 0 | 0 | 0 |
| Currency | (562) | 0 | 0 | 0 | 0 | 0 |
| Currency/Interest Rate | 1,124 | 0 | 5 | 0 | 0 | 0 |
| Credit | (22) | 0 | 0 | 0 | 0 | 0 |
| Equity | $(1,605)$ | 0 | 0 | 0 | 0 | 0 |
| Commodity | 1 | 0 | 0 | 0 | 0 | 0 |
| Embedded Derivatives | $(6,734)$ | 0 | 0 | 0 | 0 | 0 |
| Total non-qualifying hedges | (175) | 0 | 5 | 0 | 0 | 0 |
| Total | \$ (188) | \$(51) | \$72 | \$(22) | \$2 | \$797 |

(1) Amounts deferred in AOCI.
(2) Relates to the sale of equity method investments.

For the year ended December 31, 2016, the ineffective portion of derivatives accounted for using hedge accounting was $\$ 5.6$ million and for the years ended December 31, 2015 and 2014, the ineffective portion of derivatives accounted for using hedge accounting was not material to the Company's results of operations. Also, there were no material amounts reclassified into earnings relating to instances in which the Company discontinued cash flow hedge accounting because the forecasted transaction did not occur by the anticipated date or within the additional time period permitted by the authoritative guidance for the accounting for derivatives and hedging. In addition, there were no instances in which the Company discontinued fair value hedge accounting due to a hedged firm commitment no longer qualifying as a fair value hedge.

Presented below is a rollforward of current period cash flow hedges in AOCI before taxes:

|  | (in millions) |
| :---: | :---: |
| Balance, December 31, 2013 | \$ (446) |
| Net deferred gains (losses) on cash flow hedges from January 1 to December 31, 2014 | 706 |
| Amount reclassified into current period earnings | (54) |
| Balance, December 31, 2014 | 206 |
| Net deferred gains (losses) on cash flow hedges from January 1 to December 31, 2015 | 1,199 |
| Amount reclassified into current period earnings | (240) |
| Balance, December 31, 2015 | 1,165 |
| Net deferred gains (losses) on cash flow hedges from January 1 to December 31, 2016 | 602 |
| Amount reclassified into current period earnings | (451) |
| Balance, December 31, 2016 | \$1,316 |

Using December 31, 2016 values, it is estimated that a pre-tax gain of approximately $\$ 161$ million will be reclassified from AOCI to earnings during the subsequent twelve months ending December 31, 2017, offset by amounts pertaining to the hedged items. As of December 31, 2016, the Company does not have any qualifying cash flow hedges of forecasted transactions other than those related to the variability of the payment or receipt of interest or foreign currency amounts on existing financial instruments. The maximum length of time

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

for which these variable cash flows are hedged is 40 years. Income amounts deferred in AOCI as a result of cash flow hedges are included in "Net unrealized investment gains (losses)" in the Consolidated Statements of Comprehensive Income.

For effective net investment hedges, the amounts, before applicable taxes, recorded in the cumulative translation adjustment account within AOCI were $\$ 536$ million in 2016, $\$ 541$ million in 2015 and $\$ 501$ million in 2014, respectively.

## Credit Derivatives

Credit derivatives, where the Company has written credit protection on a single name reference, had outstanding notional amounts of $\$ 112$ million and $\$ 106$ million as of December 31, 2016 and 2015, respectively. These credit derivatives are reported at fair value as an asset of less than $\$ 1$ million and a liability of $\$ 3$ million, as of December 31, 2016 and 2015, respectively. As of December 31, 2016, these credit derivatives' notionals had the following NAIC ratings: $\$ 48$ million in NAIC $1, \$ 48$ million in NAIC 2 , $\$ 5$ million in NAIC 3, $\$ 1$ million in NAIC 4, $\$ 6$ million in NAIC 5 and $\$ 4$ million in NAIC 6 . The Company has also written credit protection on certain index references with notional amounts of $\$ 50$ million and $\$ 701$ million, reported at fair value as a liability of less than $\$ 1$ million and $\$ 24$ million as of December 31, 2016 and 2015, respectively. As of December 31, 2016, these credit derivatives' notionals of $\$ 50$ million had a NAIC rating of 1 . NAIC designations are based on the lowest rated single name reference included in the index.

The Company's maximum amount at risk under these credit derivatives equals the aforementioned notional amounts and assumes the value of the underlying referenced securities become worthless. These single name credit derivatives have maturities of less than 4 years, while the credit protection on the index references have maturities of less than 31 years. This excludes a credit derivative related to surplus notes issued by a subsidiary of Prudential Insurance.

The Company also entered into a credit derivative that will require the Company to make certain payments in the event of deterioration in the value of the surplus notes issued by a subsidiary of Prudential Insurance. The notional amount of this credit derivative is $\$ 500$ million and the fair value as of December 31, 2016 and 2015, was a liability of $\$ 17$ million and $\$ 15$ million, respectively. No collateral was pledged in either period.

In addition to writing credit protection, the Company has purchased credit protection using credit derivatives in order to hedge specific credit exposures in the Company's investment portfolio. As of December 31, 2016 and 2015, the Company had $\$ 256$ million and $\$ 532$ million of outstanding notional amounts, respectively, reported at fair value as a liability of $\$ 8$ million for both years.

## Counterparty Credit Risk

The Company is exposed to credit-related losses in the event of non-performance by counterparties to financial derivative transactions. The Company manages credit risk by entering into derivative transactions with highly rated major international financial institutions and other creditworthy counterparties, and by obtaining collateral, such as cash and securities, when appropriate. Additionally, limits are set on single party credit exposures which are subject to periodic management review.

The credit exposure of the Company's OTC derivative transactions is represented by the contracts with a positive fair value at the reporting date. To reduce credit exposures, the Company seeks to (i) enter into OTC derivative transactions pursuant to master agreements that provide for a netting of payments and receipts with a single counterparty and (ii) enter into agreements that allow the use of credit support annexes, which are bilateral rating-sensitive agreements that require collateral postings at established threshold levels. Cleared derivatives are transactions between the Company and a counterparty where the transactions are cleared through a clearinghouse, such that each derivative counterparty is only exposed to the default of the clearinghouse. These cleared transactions require initial and daily variation margin collateral postings and include certain interest rate swaps and credit default swaps entered into on or after June 10, 2013, related to guidelines under Dodd-Frank. The Company also enters into exchange-traded futures and certain options transactions through regulated exchanges and these transactions are settled on a daily basis, thereby reducing credit risk exposure in the event of non-performance by counterparties to such financial instruments.

Under fair value measurements, the Company incorporates the market's perception of its own and the counterparty's NPR in determining the fair value of the portion of its OTC derivative assets and liabilities that are uncollateralized. Credit spreads are applied to the derivative fair values on a net basis by counterparty. To reflect the Company's own credit spread a proxy based on relevant debt spreads is applied to OTC derivative net liability positions. Similarly, the Company's counterparty's credit spread is applied to OTC derivative net asset positions.

Certain of the Company's derivative agreements with some of its counterparties contain credit-rating related triggers. If the Company's credit rating were to fall below a certain level, the counterparties to the derivative instruments could request termination at the then fair value of the derivative or demand immediate full collateralization on derivative instruments in net liability positions. As of December 31, 2016, there were no net liability derivative positions with counterparties with credit-risk-related contingent features. As such, the Company has not posted any collateral related to these positions and the Company would not be required to post any additional collateral to the counterparties if the credit-risk-related contingent features underlying these agreements had been triggered as of December 31, 2016.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 22. SEGMENT INFORMATION

## Segments

As discussed in Note 1, from December 18, 2001, the date of demutualization, through December 31, 2014, the Company organized its principal operations into the Financial Services Businesses and the Closed Block Business. As a result of the Class B Repurchase on January 2, 2015, the Company no longer organizes its principal operations into the Financial Services Businesses and the Closed Block Business. The Company operates through four divisions, which together encompass seven reportable segments, and its Corporate and Other operations.
U.S. Retirement Solutions and Investment Management division. The U.S. Retirement Solutions and Investment Management division consists of the Individual Annuities, Retirement and Asset Management segments. The Individual Annuities segment manufactures and distributes individual variable and fixed annuity products, primarily to the U.S. mass affluent market. The Retirement segment manufactures and distributes products and provides administrative services for qualified and non-qualified retirement plans and offers innovative pension risk transfer solutions, investment-only stable value products, guaranteed investment contracts, funding agreements, institutional and retail notes, structured settlement annuities and other group annuities. The Asset Management segment provides a broad array of investment management and advisory services by means of institutional portfolio management, mutual funds, asset securitization activity and other structured products, and strategic investments. These products and services are provided to the public and private marketplace, as well as to other segments of the Company.
U.S. Individual Life and Group Insurance division. The U.S. Individual Life and Group Insurance division consists of the Individual Life and Group Insurance segments. The Individual Life segment manufactures and distributes individual variable life, term life and universal life insurance products primarily to the U.S. mass middle, mass affluent and affluent markets. The Group Insurance segment manufactures and distributes a full range of group life, long-term and short-term group disability, and group corporate-, bank- and trustowned life insurance in the U.S. primarily to institutional clients for use in connection with employee plans and affinity groups.

International Insurance division. The International Insurance division consists of the International Insurance segment, which manufactures and distributes individual life insurance, retirement and related products to the mass affluent and affluent markets in Japan, Korea and other foreign countries through its Life Planner operations. In addition, similar products are offered to the broad middle income market across Japan through Life Consultants, the proprietary distribution channel of the Company's Gibraltar Life operation, as well as other channels, including banks and independent agencies.

Corporate and Other. Corporate and Other includes corporate items and initiatives that are not allocated to business segments, and divested businesses. Corporate operations consist primarily of: (1) capital that is not deployed in any business segments; (2) investments not allocated to business segments, including debt-financed investment portfolios, as well as tax credit investments and other tax-enhanced investments financed by business segments; (3) capital debt that is used or will be used to meet the capital requirements of the Company and the related interest expense; (4) the Company's qualified pension and other employee benefit plans, after allocations to business segments; (5) corporate-level activities, after allocations to business segments, including strategic expenditures, corporate governance, corporate advertising, philanthropic activities, deferred compensation, and costs related to certain contingencies and enhanced regulatory supervision; (6) certain retained obligations relating to pre-demutualization policyholders; (7) a life insurance joint venture and an asset management joint venture in China; (8) the Company's Capital Protection Framework; (9) the foreign currency income hedging program used to hedge certain non-U.S. dollar denominated earnings in our International Insurance segment; (10) the impact of intercompany arrangements with our Retirement and Asset Management segments to translate certain non-U.S. dollar-denominated earnings at fixed currency exchange rates; and (11) transactions with and between other segments.

Closed Block division. The Closed Block division includes certain in force participating insurance and annuity products and corresponding assets that are used for the payment of benefits, expenses and policyholders' dividends related to these products, as well as certain related assets and liabilities. In connection with demutualization, the Company ceased offering these participating products. The Closed Block division is accounted for as a divested business that is reported separately from the divested businesses that are included in the Company's Corporate and Other operations. See Note 12 for additional information on the Closed Block.

Segment Accounting Policies. The accounting policies of the segments are the same as those described in Note 2. Results for each segment include earnings on attributed equity established at a level which management considers necessary to support each segment's risks. Operating expenses specifically identifiable to a particular segment are allocated to that segment as incurred. Operating expenses not identifiable to a specific segment that are incurred in connection with the generation of segment revenues are generally allocated based upon the segment's historical percentage of general and administrative expenses.

For information related to significant acquisitions and dispositions, see Note 3. For information related to the adoption of new accounting pronouncements, see Note 2 . The segments' results in prior years have been revised for these items, as applicable, to conform to the current year presentation.

## Adjusted Operating Income

The Company analyzes the operating performance of each segment using "adjusted operating income." Adjusted operating income does not equate to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" or "Net income (loss)" as determined in accordance with U.S. GAAP but is the measure of segment profit or loss used by the Company's

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

chief operating decision maker to evaluate segment performance and allocate resources, and consistent with authoritative guidance, is the measure of segment performance presented below. Adjusted operating income is calculated by adjusting each segment's "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" for the following items, which are described in greater detail below:

- realized investment gains (losses), net, and related charges and adjustments;
- net investment gains (losses) on trading account assets supporting insurance liabilities and changes in experience-rated contractholder liabilities due to asset value changes;
- the contribution to income (loss) of divested businesses that have been or will be sold or exited, including businesses that have been placed in wind down status, but that did not qualify for "discontinued operations" accounting treatment under U.S. GAAP; and
- equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests.

These items are important to an understanding of overall results of operations. Adjusted operating income is not a substitute for income determined in accordance with U.S. GAAP, and the Company's definition of adjusted operating income may differ from that used by other companies. However, the Company believes that the presentation of adjusted operating income as measured for management purposes enhances the understanding of results of operations by highlighting the results from ongoing operations and the underlying profitability factors of its businesses.

As discussed in Note 1, during 2016, the Company recorded out of period adjustments resulting in an aggregate net decrease of $\$ 134$ million to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" for the year ended December 31, 2016. These adjustments resulted in a decrease in pre-tax adjusted operating income of $\$ 114$ million for the year ended December 31, 2016, principally consisting of a net decrease of $\$ 153$ million for the Individual Life Insurance segment.

In addition, as previously disclosed in its Annual Report on Form 10-K for the year ended December 31, 2014, during 2014, the Company recorded out of period adjustments resulting in an aggregate net decrease of $\$ 193$ million to "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures." Subsequent to 2014, the Company identified and recorded additional out of period adjustments of $\$ 41$ million related to 2014, primarily reflecting a benefit from the release of reserves related to certain variable annuities products with optional living benefit guarantees, net of a related decrease in DAC, offset by the increase in reserves, net of a related increase in DAC, for certain universal life products within the Individual Life business. The impact of these items resulted in a decrease in pre-tax adjusted operating income of $\$ 155$ million for the year ended December 31, 2014, principally consisting of a net decrease of $\$ 77$ million for the Group Insurance segment and $\$ 72$ million for the International Insurance segment.

## Realized investment gains (losses), net, and related charges and adjustments

## Realized investment gains (losses), net

Adjusted operating income excludes "Realized investment gains (losses), net," except for certain items described below. Significant activity excluded from adjusted operating income includes impairments and credit-related gains (losses) from sales of securities, the timing of which depends largely on market credit cycles and can vary considerably across periods, and interest rate-related gains (losses) from sales of securities, which are largely subject to the Company's discretion and influenced by market opportunities, as well as the Company's tax and capital profile. Additionally, adjusted operating income generally excludes realized investment gains and losses from products that contain embedded derivatives, and from associated derivative portfolios that are part of an asset liability management program related to the risk of those products. However, the effectiveness of the hedging program will ultimately be reflected in adjusted operating income over time. Trends in the underlying profitability of the Company's businesses can be more clearly identified without the fluctuating effects of these transactions.

The following table sets forth the significant components of "Realized investment gains (losses), net" that are included in adjusted operating income and, as a result, are reflected as adjustments to "Realized investment gains (losses), net" for purposes of calculating adjusted operating income:

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Net gains (losses) from(1): |  |  |  |
| Terminated hedges of foreign currency earnings | \$ 39 | \$284 | \$293 |
| Current period yield adjustments | \$466 | \$475 | \$476 |
| Principal source of earnings | \$ 74 | \$123 | \$100 |

(1) In addition to the items in the table above, "Realized investment gains (losses), net, and related charges and adjustments" also includes an adjustment to reflect "Realized investment gains (losses), net" related to divested businesses as results of "Divested businesses," discussed below.

Terminated Hedges of Foreign Currency Earnings. The amounts shown in the table above primarily reflect the impact of an intercompany arrangement between Corporate and Other operations and the International Insurance segment, pursuant to which the

## PRUDENTIAL FINANCIAL, INC.

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non-U.S. dollar-denominated earnings in all countries for a particular year, including its interim reporting periods, are translated at fixed currency exchange rates. The fixed rates are determined in connection with a currency hedging program designed to mitigate the risk that unfavorable rate changes will reduce the segment's U.S. dollar-equivalent earnings. Pursuant to this program, the Company's Corporate and Other operations may execute forward currency contracts with third parties to sell the net exposure of projected earnings from the hedged currency in exchange for U.S. dollars at a specified exchange rate. The maturities of these contracts correspond with the future periods in which the identified non-U.S. dollar-denominated earnings are expected to be generated. These contracts do not qualify for hedge accounting under U.S. GAAP, so the resulting profits or losses are recorded in "Realized investment gains (losses), net." When the contracts are terminated in the same period that the expected earnings emerge, the resulting positive or negative cash flow effect is included in adjusted operating income.

Current Period Yield Adjustments. The Company uses interest rate and currency swaps and other derivatives to manage interest and currency exchange rate exposures arising from mismatches between assets and liabilities, including duration mismatches. For derivative contracts that do not qualify for hedge accounting treatment, the periodic swap settlements, as well as certain other derivative related yield adjustments are recorded in "Realized investment gains (losses), net," and are included in adjusted operating income to reflect the afterhedge yield of the underlying instruments. In certain instances, when these derivative contracts are terminated or offset before their final maturity, the resulting realized gains or losses are recognized in adjusted operating income over periods that generally approximate the expected terms of the derivatives or underlying instruments in order for adjusted operating income to reflect the after-hedge yield of the underlying instruments. Included in the amounts shown in the table above are gains on certain derivative contracts that were terminated or offset before their final maturity of $\$ 49$ million, $\$ 55$ million and $\$ 105$ million for the years ended 2016, 2015 and 2014, respectively. As of December 31, 2016, there was a $\$ 169$ million deferred net gain related to certain derivative contracts that were terminated or offset before their final maturity, primarily in the International Insurance segment. Also included in the amounts shown in the table above are fees related to synthetic GICs of $\$ 158$ million, $\$ 158$ million and $\$ 168$ million for the years ended 2016, 2015 and 2014, respectively. Synthetic GICs are accounted for as derivatives under U.S. GAAP and, therefore, these fees are recorded in "Realized investment gains (losses), net." See Note 21 for additional information on synthetic GICs.

Principal Source of Earnings. The Company conducts certain activities for which realized investment gains (losses) are a principal source of earnings for its businesses and therefore included in adjusted operating income, particularly within the Company's Asset Management segment. For example, Asset Management's strategic investing business makes investments for sale or syndication to other investors or for placement or co-investment in the Company's managed funds and structured products. The realized investment gains (losses) associated with the sale of these strategic investments, as well as the majority of derivative results, are a principal activity for this business and included in adjusted operating income. In addition, the realized investment gains (losses) associated with loans originated by the Company's commercial mortgage operations, as well as related derivative results and retained mortgage servicing rights, are a principal activity for this business and included in adjusted operating income.

## Other items reflected as adjustments to Realized investment gains (losses), net

The following table sets forth certain other items excluded from adjusted operating income and reflected as an adjustment to "Realized investment gains (losses), net" for purposes of calculating adjusted operating income:

|  | Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Net gains (losses) from: |  |  |  |
| Other trading account assets | \$ (95) | \$(94) | \$ (21) |
| Foreign currency exchange movements | \$(154) | \$ 69 | \$ $(3,023)$ |
| Other activities | \$ (18) | \$ 9 | \$ 13 |

Other Trading Account Assets. The Company has certain investments in its general account portfolios that are classified as trading. These trading investments are carried at fair value and included in "Other trading account assets, at fair value" on the Company's Consolidated Statements of Financial Position. Realized and unrealized gains (losses) for these investments are recorded in "Other income." Consistent with the exclusion of realized investment gains (losses) with respect to other investments managed on a consistent basis, the net gains or losses on these investments are excluded from adjusted operating income.

Foreign Currency Exchange Movements. The Company has certain assets and liabilities for which, under U.S. GAAP, the changes in value, including those associated with changes in foreign currency exchange rates during the period, are recorded in "Other income." To the extent the foreign currency exposure on these assets and liabilities is economically hedged or considered part of the Company's capital funding strategies for its international subsidiaries, the change in value included in "Other income" is excluded from adjusted operating income. The amount in the table above for the year ended 2014 was largely driven by non-yen denominated insurance liabilities in the Company's Japanese insurance operations. The insurance liabilities are supported by investments denominated in corresponding currencies, including a significant portion designated as available-for-sale. While these non-yen denominated assets and liabilities are economically hedged, unrealized gains (losses) on available-for-sale investments, including those arising from foreign currency exchange rate movements, are recorded in AOCI under U.S. GAAP, while the non-yen denominated liabilities are re-measured for foreign currency exchange rate movements, with the related change in value recorded in earnings within "Other income." Due to this non-economic volatility that has been reflected in U.S. GAAP earnings, the change in value recorded within "Other income" is excluded from adjusted operating income.

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As a result of continued growth in these portfolios, the Company implemented a reporting structure in Gibraltar Life that disaggregated the U.S. and Australian dollar-denominated businesses into separate divisions, each with its own functional currency that aligns with the underlying products and investments. The new structure was effective for financial reporting beginning in the first quarter of 2015 and has minimized volatility in reported U.S. GAAP earnings arising from foreign currency remeasurement.

Other Activities. The Company excludes certain other items from adjusted operating income that are consistent with similar adjustments described above.

## Related charges

Charges that relate to realized investment gains (losses) are also excluded from adjusted operating income, and include the following:

- The portion of the amortization of DAC, VOBA, unearned revenue reserves and DSI for certain products that is related to net realized investment gains (losses).
- Policyholder dividends and interest credited to policyholders' account balances that relate to certain life policies that pass back certain realized investment gains (losses) to the policyholder, and reserves for future policy benefits for certain policies that are affected by net realized investment gains (losses).
- Market value adjustments paid or received upon a contractholder's surrender of certain of the Company's annuity products as these amounts mitigate the net realized investment gains or losses incurred upon the disposition of the underlying invested assets.


## Investment gains (losses) on trading account assets supporting insurance liabilities and changes in experience-rated contractholder liabilities due to asset value changes

Certain products included in the Retirement and International Insurance segments are experience-rated in that investment results associated with these products are expected to ultimately accrue to contractholders. The majority of investments supporting these experience-rated products are classified as trading and are carried at fair value, with realized and unrealized gains (losses) reported in "Other income." To a lesser extent, these experience-rated products are also supported by derivatives and commercial mortgage and other loans. The derivatives are carried at fair value, with realized and unrealized gains (losses) reported in "Realized investment gains (losses), net." The commercial mortgage and other loans are carried at unpaid principal, net of unamortized discounts and an allowance for losses, with gains (losses) on sales and changes in the valuation allowance for commercial mortgage and other loans reported in "Realized investment gains (losses), net."

Adjusted operating income excludes net investment gains (losses) on trading account assets supporting insurance liabilities, which is consistent with the exclusion of realized investment gains (losses) with respect to other investments supporting insurance liabilities managed on a consistent basis. In addition, to be consistent with the historical treatment of charges related to realized investment gains (losses) on investments, adjusted operating income also excludes the change in contractholder liabilities due to asset value changes in the pool of investments (including changes in the fair value of commercial mortgage and other loans) supporting these experience-rated contracts, which are reflected in "Interest credited to policyholders' account balances." These adjustments are in addition to the exclusion from adjusted operating income of net investment gains (losses) on the related derivatives and commercial mortgage and other loans through "Realized investment gains (losses), net, and related charges and adjustments," as discussed above. The result of this approach is that adjusted operating income for these products includes net fee revenue and interest spread the Company earns on these experience-rated contracts, and excludes changes in fair value of the pool of investments, both realized and unrealized, that are expected to ultimately accrue to the contractholders.

## Divested businesses

The contribution to income (loss) of divested businesses that have been or will be sold or exited, including businesses that have been placed in wind down, but that did not qualify for "discontinued operations" accounting treatment under U.S. GAAP, are excluded from adjusted operating income as the results of divested businesses are not considered relevant to understanding the Company's ongoing operating results.

As discussed in Note 1, the Class B Repurchase on January 2, 2015 resulted in the elimination of the separate reporting of the Company's former Financial Services Businesses and Closed Block Business. As a result of the Class B Repurchase, for the years ended December 31, 2016 and 2015, the Closed Block division, which is comprised of the Closed Block segment, has been accounted for as a divested business because it consists primarily of certain participating insurance and annuity products that the Company ceased selling at demutualization in 2001. See Note 12 for further information on the Closed Block. For the reporting period ending December 31, 2014, the Closed Block segment was reported as the Closed Block Business and was analyzed using U.S. GAAP rather than adjusted operating income. Both the current reporting of the Closed Block division and the historic reporting of the Closed Block Business exclude its results from adjusted operating income.

## Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests

Equity in earnings of operating joint ventures, on a pre-tax basis, are included in adjusted operating income as these results are a principal source of earnings. These earnings are reflected on a U.S. GAAP basis on an after-tax basis as a separate line on the Company's Consolidated Statements of Operations.

## PRUDENTIAL FINANCIAL, INC.

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Earnings attributable to noncontrolling interests are excluded from adjusted operating income. Earnings attributable to noncontrolling interests represents the portion of earnings from consolidated entities that relates to the equity interests of minority investors, and are reflected on a U.S. GAAP basis as a separate line on the Company's Consolidated Statements of Operations.

## Reconciliation of adjusted operating income and net income (loss)

The table below reconciles adjusted operating income before income taxes to income from continuing operations before income taxes and equity in earnings of operating joint ventures:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
|  | (in millions) |  |  |
| Adjusted operating income before income taxes by segment: |  |  |  |
| Individual Annuities | \$ 1,765 | \$ 1,797 | \$ 1,467 |
| Retirement | 1,012 | 931 | 1,215 |
| Asset Management | 787 | 779 | 785 |
| Total U.S. Retirement Solutions and Investment Management division | 3,564 | 3,507 | 3,467 |
| Individual Life | 79 | 635 | 498 |
| Group Insurance | 220 | 176 | 23 |
| Total U.S. Individual Life and Group Insurance division | 299 | 811 | 521 |
| International Insurance | 3,117 | 3,226 | 3,252 |
| Total International Insurance division | 3,117 | 3,226 | 3,252 |
| Corporate and Other operations | (1,581) | $(1,313)$ | $(1,348)$ |
| Total Corporate and Other | (1,581) | $(1,313)$ | $(1,348)$ |
| Total segment adjusted operating income before income taxes | 5,399 | 6,231 | 5,892 |
| Reconciling Items: |  |  |  |
| Realized investment gains (losses), net, and related adjustments | 989 | 2,258 | $(3,588)$ |
| Charges related to realized investment gains (losses), net | (466) | (679) | (542) |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net | (17) | (524) | 339 |
| Change in experience-rated contractholder liabilities due to asset value changes | 21 | 433 | (294) |
| Divested businesses: |  |  |  |
| Closed Block division(1) | (132) | 58 | 0 |
| Other divested businesses | (84) | (66) | 167 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (5) | 58 | 44 |
| Subtotal(2) | 5,705 | 7,769 | 2,018 |
| Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures for Closed Block Business(3) | 0 | 0 | (259) |
| Consolidated income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures | \$ 5,705 | \$7,769 | \$ 1,759 |

(1) As a result of the Class B Repurchase, for the years ended December 31, 2016 and 2015, the Closed Block, along with certain related assets and liabilities, comprises the Closed Block division, which is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations.
(2) Amounts for the year ended December 31, 2014 represent "Income (loss) from continuing operations before income taxes and equity in earnings of operating joint ventures" of the Company's former Financial Services Businesses, reflecting the existence of two classes of common stock and the separate reporting of the Financial Services Businesses and the Closed Block Business for each period.
(3) Reflects the existence of two classes of common stock and the separate reporting of the Company's former Financial Services Businesses and the Closed Block Business for the year ended December 31, 2014.

The Individual Annuities segment results reflect DAC as if the individual annuity business is a stand-alone operation. The elimination of intersegment costs capitalized in accordance with this policy is included in consolidating adjustments within Corporate and Other operations.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Reconciliation of select financial information

The tables below present certain financial information for the Company's reportable segments:

|  | As of De | mber 31, |
| :---: | :---: | :---: |
|  | 2016 | 2015(1) |
|  | (in m | lions) |
| Total Assets: |  |  |
| Individual Annuities | \$170,861 | \$169,447 |
| Retirement | 173,509 | 171,183 |
| Asset Management | 49,255 | 54,491 |
| Total U.S. Retirement Solutions and Investment Management division | 393,625 | 395,121 |
| Individual Life | 77,524 | 71,856 |
| Group Insurance | 40,642 | 39,344 |
| Total U.S. Individual Life and Group Insurance division | 118,166 | 111,200 |
| International Insurance | 197,119 | 175,153 |
| Total International Insurance division | 197,119 | 175,153 |
| Corporate and Other operations | 13,001 | 13,654 |
| Total Corporate and Other | 13,001 | 13,654 |
| Closed Block | 62,051 | 62,127 |
| Total Closed Block division | 62,051 | 62,127 |
| Total per Consolidated Statements of Financial Position | \$783,962 | \$757,255 |

(1) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-03.

|  | Year Ended December 31, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Revenues }}$ | Net Investment Income | Policyholders' Benefits | Interest Credited to Policyholders' Account Balances | Dividends to Policyholders | Interest <br> Expense | Amortization of DAC |
|  |  |  |  | (in millions) |  |  |  |
| Individual Annuities | \$ 4,666 | \$ 698 | \$ 306 | \$ 362 | \$ 0 | \$ 71 | \$ 484 |
| Retirement | 12,876 | 4,263 | 9,328 | 1,473 | 0 | 19 | 33 |
| Asset Management | 2,961 | 80 | 0 | 0 | 0 | 15 | 15 |
| Total U.S. Retirement Solutions and Investment Management division | 20,503 | 5,041 | 9,634 | 1,835 | 0 | 105 | 532 |
| Individual Life | 5,355 | 1,822 | 2,750 | 680 | 35 | 583 | 115 |
| Group Insurance | 5,343 | 608 | 4,032 | 263 | 0 | 5 | 6 |
| Total U.S. Individual Life and Group Insurance division | 10,698 | 2,430 | 6,782 | 943 | 35 | 588 | 121 |
| International Insurance | 21,009 | 4,759 | 13,183 | 920 | 49 | 8 | 1,068 |
| Total International Insurance division | 21,009 | 4,759 | 13,183 | 920 | 49 | 8 | 1,068 |
| Corporate and Other operations | (636) | 465 | 26 | 0 | 0 | 614 | (49) |
| Total Corporate and Other | (636) | 465 | 26 | 0 | 0 | 614 | (49) |
| Total | 51,574 | 12,695 | 29,625 | 3,698 | 84 | 1,315 | 1,672 |
| Reconciling items: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net, and related adjustments | 989 | (31) | 0 | 0 | 0 | 0 | 0 |
| Charges related to realized investment gains (losses), net | 19 | 0 | 131 | (50) | 0 | 0 | 168 |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net | (17) | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in experience-rated contractholder liabilities due to assets value changes | 0 | 0 | 0 | (21) | 0 | 0 | 0 |
| Divested businesses: |  |  |  |  |  |  |  |
| Closed Block division(1) | 5,669 | 2,578 | 3,282 | 134 | 1,941 | 2 | 37 |
| Other divested businesses . . . . . . . . . . . . . . . | 602 | 278 | 594 | 0 | 0 | 3 | 0 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (57) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total per Consolidated Statements of Operations | \$58,779 | \$15,520 | \$33,632 | \$3,761 | \$2,025 | \$1,320 | \$1,877 |

(1) As a result of the Class B Repurchase, for the year ended December 31, 2016, the Closed Block, along with certain related assets and liabilities, comprises the Closed Block division, which is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  | Year Ended December 31, 2015 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Revenues }}$ | Net Investment Income | Policyholders' Benefits | Interest Credited to Policyholders, Account Balances | Dividends to Policyholders | Interest Expense | Amortization of DAC |
|  |  |  |  | (in millions) |  |  |  |
| Individual Annuities | \$ 4,695 | \$ 603 | \$ 314 | \$ 363 | \$ 0 | \$ 69 | \$ 465 |
| Retirement | 11,821 | 4,082 | 8,352 | 1,441 | (2) | 25 | 66 |
| Asset Management | 2,944 | 111 | 0 | 0 | 0 | 10 | 19 |
| Total U.S. Retirement Solutions and Investment Management division | 19,460 | 4,796 | 8,666 | 1,804 | (2) | 104 | 550 |
| Individual Life | 5,233 | 1,669 | 2,245 | 644 | 33 | 550 | 133 |
| Group Insurance | 5,143 | 586 | 3,868 | 257 | 0 | 8 | 6 |
| Total U.S. Individual Life and Group Insurance division | 10,376 | 2,255 | 6,113 | 901 | 33 | 558 | 139 |
| International Insurance | 19,364 | 4,357 | 11,821 | 880 | 51 | 5 | 989 |
| Total International Insurance division | 19,364 | 4,357 | 11,821 | 880 | 51 | 5 | 989 |
| Corporate and Other operations | (570) | 550 | 16 | 0 | 0 | 635 | (47) |
| Total Corporate and Other | (570) | 550 | 16 | 0 | 0 | 635 | (47) |
| Total | 48,630 | 11,958 | 26,616 | 3,585 | 82 | 1,302 | 1,631 |
| conciling items: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net, and related adjustments | 2,258 | 1 | 0 | 0 | 0 | 0 | 0 |
| Charges related to realized investment gains (losses), net | (31) | 0 | 39 | 191 | 0 | 0 | 452 |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net | (524) | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in experience-rated contractholder liabilities due to assets value changes | 0 | 0 | 0 | (433) | 0 | 0 | 0 |
| Divested businesses: |  |  |  |  |  |  |  |
| Closed Block division(1) | 6,160 | 2,653 | 3,365 | 135 | 2,130 | 1 | 37 |
| Other divested businesses . | 638 | 217 | 607 | 1 | 0 | 3 | 0 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (12) | 0 | 0 | 0 | 0 | 0 | 0 |
| al per Consolidated Statements of Operations .... | \$57,119 | \$14,829 | \$30,627 | \$3,479 | \$2,212 | \$1,306 | \$2,120 |

(1) As a result of the Class B Repurchase, for the year ended December 31, 2015, the Closed Block, along with certain related assets and liabilities, comprises the Closed Block division, which is accounted for as a divested business that is reported separately from the divested businesses that are included in Corporate and Other operations.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

|  |  |  | Year En | ded December | 1,2014 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Revenues | Net Investment Income | Policyholders' Benefits | Interest Credited to Policyholders' Account Balances | Dividends to Policyholders | Interest Expense | Amortization of DAC |
|  |  |  |  | (in millions) |  |  |  |
| Individual Annuities | \$ 4,710 | \$ 630 | \$ 481 | \$ 429 | \$ 0 | \$ 107 | \$ 543 |
| Retirement | 12,077 | 4,209 | 8,336 | 1,476 | 0 | 25 | 31 |
| Asset Management | 2,840 | 120 | 0 | 0 | 0 | 10 | 20 |
| Total U.S. Retirement Solutions and Investment Management division | 19,627 | 4,959 | 8,817 | 1,905 | 0 | 142 | 594 |
| Individual Life | 5,226 | 1,620 | 2,108 | 606 | 32 | 533 | 345 |
| Group Insurance | 5,357 | 613 | 4,215 | 248 | 0 | 9 | 8 |
| Total U.S. Individual Life and Group Insurance division | 10,583 | 2,233 | 6,323 | 854 | 32 | 542 | 353 |
| International Insurance | 20,066 | 4,434 | 12,234 | 961 | 50 | 4 | 961 |
| Total International Insurance division | 20,066 | 4,434 | 12,234 | 961 | 50 | 4 | 961 |
| Corporate and Other operations | (632) | 420 | 83 | 0 | 0 | 620 | (55) |
| Total Corporate and Other | (632) | 420 | 83 | 0 | 0 | 620 | (55) |
| Total | 49,644 | 12,046 | 27,457 | 3,720 | 82 | 1,308 | 1,853 |
| Reconciling items: |  |  |  |  |  |  |  |
| Realized investment gains (losses), net, and related adjustments | $(3,588)$ | (5) | 0 | 0 | 0 | 0 | 0 |
| Charges related to realized investment gains (losses), net | 55 | 0 | 295 | 111 | (1) | 0 | 83 |
| Investment gains (losses) on trading account assets supporting insurance liabilities, net . . . . . . . . . . | 339 | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in experience-rated contractholder liabilities due to assets value changes | 0 | 0 | 0 | 294 | 0 | 0 | 0 |
| Divested businesses | 762 | 208 | 509 | 2 | 0 | 3 | 0 |
| Equity in earnings of operating joint ventures and earnings attributable to noncontrolling interests | (13) | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 47,199 | 12,249 | 28,261 | 4,127 | 81 | 1,311 | 1,936 |
| Closed Block Business(1) | 6,906 | 3,007 | 3,326 | 136 | 2,635 | 597 | 37 |
| Total per Consolidated Statements of Operations | \$54,105 | \$15,256 | \$31,587 | \$4,263 | \$2,716 | \$1,908 | \$1,973 |

(1) Reflects the existence of two classes of common stock and the separate reporting of the Company's former Financial Services Businesses and the Closed Block Business for the year ended December 31, 2014.

Revenues, calculated in accordance with U.S. GAAP, for the years ended December 31, include the following associated with the Company's foreign and domestic operations:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  |  | n millions |  |
| Domestic operations | \$36,079 | \$36,151 | \$35,793 |
| Foreign operations, total | \$22,700 | \$20,968 | \$18,312 |
| Foreign operations, Japan | \$19,768 | \$18,177 | \$15,461 |
| Foreign operations, Korea | \$ 1,439 | \$ 1,462 | \$ 1,484 |

Management has determined the intersegment revenues with reference to market rates. Intersegment revenues are eliminated in consolidation in Corporate and Other. The Asset Management segment revenues include intersegment revenues, primarily consisting of asset-based management and administration fees, for the years ended December 31, as follows:

|  | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |
| Asset Management segment intersegment revenue | \$682 | \$682 | \$645 |

Segments may also enter into internal derivative contracts with other segments. For adjusted operating income, each segment accounts for the internal derivative results consistent with the manner in which that segment accounts for other similar external derivatives.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## 23. COMMITMENTS AND GUARANTEES, CONTINGENT LIABILITIES AND LITIGATION AND REGULATORY MATTERS

## Leases

The Company occupies leased office space in many locations under various long-term leases and has entered into numerous leases covering the long-term use of computers and other equipment. Rental expense, net of sub-lease income, incurred for the years ended December 31, 2016, 2015 and 2014 was $\$ 252$ million, $\$ 232$ million and $\$ 225$ million, respectively.

The following table presents, at December 31, 2016, the Company's future minimum lease payments under non-cancelable operating and capital leases along with associated sub-lease income:

|  | Operating and Capital Leases(1) | Sub-lease Income |
| :---: | :---: | :---: |
|  | (in millio |  |
| 2017 | \$150 | \$(1) |
| 2018 | 129 | 0 |
| 2019 | 106 | 0 |
| 2020 | 80 | 0 |
| 2021 | 68 | 0 |
| 2022 and thereafter | 185 | 0 |
| Total | \$718 | \$(1) |

(1) Future minimum lease payments under capital leases were $\$ 24$ million as of December 31, 2016.

Occasionally, for business reasons, the Company may exit certain non-cancelable operating leases prior to their expiration. In these instances, the Company's policy is to accrue, at the time it ceases to use the property being leased, the future rental expense net of any expected sub-lease income, and to release this reserve over the remaining commitment period. Of the total non-cancelable operating and capital leases amounts listed above, $\$ 2$ million has been accrued as of December 31, 2016. There were no accruals of sub-lease income as of December 31, 2016.

## Commercial Mortgage Loan Commitments

|  | $\underset{2016}{\text { As of } \mathrm{DC}}$ | $\underset{2015}{\text { mber } 31,}$ |
| :---: | :---: | :---: |
|  | (in m | ions) |
| Total outstanding mortgage loan commitments | \$1,984 | \$2,272 |
| Portion of commitment where prearrangement to | \$ 454 | \$ 721 |

In connection with the Company's commercial mortgage operations, it originates commercial mortgage loans. Commitments for loans that will be held for sale are recognized as derivatives and recorded at fair value. In certain of these transactions, the Company pre-arranges that it will sell the loan to an investor, including to government sponsored entities as discussed below, after the Company funds the loan.

## Commitments to Purchase Investments (excluding Commercial Mortgage Loans)

|  | $\begin{aligned} & \text { As of December 31, } \\ & 2016 \end{aligned}$ |  |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Expected to be funded from the general account and other operations outside the separate accounts(1) | \$6,002 | \$3,787 |
| Expected to be funded from separate accounts | \$ 374 | \$ 92 |

(1) Includes a remaining commitment of $\$ 121$ million and $\$ 152$ million at December 31, 2016 and 2015, respectively, related to the Company's agreement to co-invest with the Fosun Group in a private equity fund, managed by the Fosun Group, for the Chinese marketplace.

The Company has other commitments to purchase or fund investments, some of which are contingent upon events or circumstances not under the Company's control, including those at the discretion of the Company's counterparties. The Company anticipates a portion of these commitments will ultimately be funded from its separate accounts.

## Indemnification of Securities Lending Transactions

|  | $\begin{gathered} \text { As of De } \\ 2016 \end{gathered}$ | $\begin{gathered} \text { nber 31, } \\ 2015, \end{gathered}$ |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Indemnification provided to mutual fund, trust fund, and insurance company separate account clients for securities lending | \$5,352 | \$15,084 |
| Fair value of related collateral associated with above indemnifications | \$5,465 | \$15,508 |
| Accrued liability associated with guarantee | \$ 0 | \$ 0 |

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

In the normal course of business, the Company may facilitate securities lending transactions on behalf of mutual funds, trust funds, and insurance company separate account clients (collectively, "the accounts") for which the Company is the investment advisor and/or the asset manager. In certain of these arrangements, the Company has provided an indemnification to the accounts to hold them harmless against losses caused by counterparty (i.e., borrower) defaults associated with the securities lending activity facilitated by the Company. Collateral is provided by the counterparty to the accounts at the inception of the loan equal to or greater than $102 \%$ of the fair value of the loaned securities and the collateral is maintained daily at $102 \%$ or greater of the fair value of the loaned securities. The Company is only at risk if the counterparty to the securities lending transaction defaults and the value of the collateral held is less than the value of the securities loaned to such counterparty. The Company believes the possibility of any payments under these indemnities is remote.

## Credit Derivatives Written

As discussed further in Note 21, the Company writes credit derivatives under which the Company is obligated to pay the counterparty the referenced amount of the contract and receive in return the defaulted security or similar security.

## Guarantees of Asset Values

|  | $\underset{2016}{\substack{\text { As of Dec }}}$ | mber 31, 2015 |
| :---: | :---: | :---: |
|  | (in m | lions) |
| Guaranteed value of third parties' assets | \$77,197 | \$72,585 |
| Fair value of collateral supporting these assets | \$77,760 | \$73,634 |
| Asset associated with guarantee, carried at fair value | \$ 5 | \$ |

Certain contracts underwritten by the Retirement segment include guarantees related to financial assets owned by the guaranteed party. These contracts are accounted for as derivatives and carried at fair value. The collateral supporting these guarantees is not reflected on the Company's balance sheet.

## Indemnification of Serviced Mortgage Loans

|  | $\begin{gathered} \text { As of December } 31 \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Maximum exposure under indemnification agreements for mortgage loans serviced by the Company | \$1,371 | \$1,200 |
| First-loss exposure portion of above | \$ 416 | \$ 371 |
| Accrued liability associated with guarantees | \$ 13 | \$ 14 |

As part of the commercial mortgage activities of the Company's Asset Management segment, the Company provides commercial mortgage origination, underwriting and servicing for certain government sponsored entities, such as Fannie Mae and Freddie Mac. The Company has agreed to indemnify the government sponsored entities for a portion of the credit risk associated with certain of the mortgages it services through a delegated authority arrangement. Under these arrangements, the Company originates multi-family mortgages for sale to the government sponsored entities based on underwriting standards they specify, and makes payments to them for a specified percentage share of losses they incur on certain loans serviced by the Company. The Company's percentage share of losses incurred generally varies from $2 \%$ to $20 \%$ of the loan balance, and is typically based on a first-loss exposure for a stated percentage of the loan balance, plus a shared exposure with the government sponsored entity for any losses in excess of the stated first-loss percentage, subject to a contractually specified maximum percentage. The Company determines the liability related to this exposure using historical loss experience, size and remaining life of the asset. The Company services $\$ 11,445$ million and $\$ 9,833$ million of mortgages subject to these loss-sharing arrangements as of December 31, 2016 and 2015, respectively, all of which are collateralized by first priority liens on the underlying multi-family residential properties. As of December 31, 2016, these mortgages had a weighted-average debt service coverage ratio of 1.82 times and a weighted-average loan-to-value ratio of $59 \%$. As of December 31, 2015, these mortgages had a weighted-average debt service coverage ratio of 1.96 times and a weighted-average loan-to-value ratio of $61 \%$. The Company's total share of losses related to indemnifications that were settled was $\$ 0$ million, $\$ 1$ million, and $\$ 1$ million for the years ended December 31, 2016, 2015, and 2014, respectively.

## Other Guarantees

|  | As of D | $\begin{aligned} & \text { nber 31, } \\ & 2015 \end{aligned}$ |
| :---: | :---: | :---: |
|  |  |  |
| Other guarantees where amount can be determined | \$58 | \$324 |
| Accrued liability for other guarantees and indemnifications | \$ 3 |  |

The Company is also subject to other financial guarantees and indemnity arrangements. The Company has provided indemnities and guarantees related to acquisitions, dispositions, investments and other transactions that are triggered by, among other things, breaches of representations, warranties or covenants provided by the Company. These obligations are typically subject to various time limitations,

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

defined by the contract or by operation of law, such as statutes of limitation. In some cases, the maximum potential obligation is subject to contractual limitations, while in other cases such limitations are not specified or applicable. Included above are $\$ 51$ million and $\$ 317$ million as of December 31, 2016 and 2015, respectively, of yield maintenance guarantees related to certain investments the Company sold. The Company does not expect to make any payments on these guarantees and is not carrying any liabilities associated with these guarantees.

Since certain of these obligations are not subject to limitations, it is not possible to determine the maximum potential amount due under these guarantees. The accrued liabilities identified above do not include retained liabilities associated with sold businesses.

## Insolvency Assessments

Most of the jurisdictions in which the Company is admitted to transact business require insurers doing business within the jurisdiction to participate in guarantee associations, which are organized to pay contractual benefits owed pursuant to insurance policies issued by impaired, insolvent or failed insurers. These associations levy assessments, up to prescribed limits, on all member insurers in a particular state on the basis of the proportionate share of the premiums written by member insurers in the lines of business in which the impaired, insolvent or failed insurer engaged. Some states permit member insurers to recover assessments paid through full or partial premium tax offsets. In addition, Japan has established the Japan Policyholders Protection Corporation as a contingency to protect policyholders against the insolvency of life insurance companies in Japan through assessments to companies licensed to provide life insurance.

Assets and liabilities held for insolvency assessments were as follows:

|  | $\begin{gathered} \text { As of D } \\ 2016 \end{gathered}$ | $\begin{array}{r} \text { nber } 3 \\ 2015 \end{array}$ |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Other assets: |  |  |
| Premium tax offset for future undiscounted assessments | \$78 | \$79 |
| Premium tax offsets currently available for paid assessments | 6 | 6 |
| Total | \$84 | \$85 |
| Other liabilities: |  |  |
| Insolvency assessments | \$52 | \$39 |

## Contingent Liabilities

On an ongoing basis, the Company's internal supervisory and control functions review the quality of sales, marketing and other customer interface procedures and practices and may recommend modifications or enhancements. From time to time, this review process results in the discovery of product administration, servicing or other errors, including errors relating to the timing or amount of payments or contract values due to customers or other parties. In certain cases, if appropriate, the Company may offer customers or other parties remediation and may incur charges, including the cost of such remediation, administrative costs and regulatory fines.

The Company is subject to the laws and regulations of states and other jurisdictions concerning the identification, reporting and escheatment of unclaimed or abandoned funds, and is subject to audit and examination for compliance with these requirements. For additional discussion of these matters, see "-Litigation and Regulatory Matters" below.

It is possible that the results of operations or the cash flow of the Company in a particular quarterly or annual period could be materially affected as a result of payments in connection with the matters discussed above or other matters depending, in part, upon the results of operations or cash flow for such period. Management believes, however, that ultimate payments in connection with these matters, after consideration of applicable reserves and rights to indemnification, should not have a material adverse effect on the Company's financial position.

## Litigation and Regulatory Matters

The Company is subject to legal and regulatory actions in the ordinary course of its businesses. Pending legal and regulatory actions include proceedings relating to aspects of the Company's businesses and operations that are specific to it and proceedings that are typical of the businesses in which it operates, including in both cases businesses that have been either divested or placed in wind down status. Some of these proceedings have been brought on behalf of various alleged classes of complainants. In certain of these matters, the plaintiffs are seeking large and/or indeterminate amounts, including punitive or exemplary damages. The outcome of litigation or a regulatory matter, and the amount or range of potential loss at any particular time, is often inherently uncertain.

The Company establishes accruals for litigation and regulatory matters when it is probable that a loss has been incurred and the amount of that loss can be reasonably estimated. For litigation and regulatory matters where a loss may be reasonably possible, but not probable, or is probable but not reasonably estimable, no accrual is established but the matter, if material, is disclosed, including matters discussed below. The Company estimates that as of December 31, 2016, the aggregate range of reasonably possible losses in excess of accruals established for those litigation and regulatory matters for which such an estimate currently can be made is less than $\$ 250$ million. Any estimate is not an indication of expected loss, if any, or the Company's maximum possible loss exposure on such matters. The Company reviews relevant information with respect to its litigation and regulatory matters on a quarterly and annual basis and updates its accruals, disclosures and estimates of reasonably possible loss based on such reviews.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Individual Annuities, Individual Life and Group Insurance

## Wells Fargo MyTerm Sales

In December 2016, the Company announced that it suspended sales of its MyTerm life insurance product through Wells Fargo pending completion of a Company-initiated review of how the product was being sold through Wells Fargo. The Company has offered to reimburse the full amount of premium with interest, to any Wells Fargo customers with concerns about the way in which the product was purchased. Wells Fargo distributed the product from June 2014 until sales were suspended, and total annualized new business premiums associated with sales through Wells Fargo were approximately $\$ 4$ million.

The Company has received inquiries, requests for information, a subpoena and a civil investigative demand related to this matter from state and federal regulators, including its lead state insurance regulator NJDOBI, state attorneys general and federal legislators, and the Company is responding to these requests. The Company has also received a shareholder demand for certain books and records under New Jersey law. Litigation related to this matter is described below. The Company may become subject to additional regulatory inquiries and other investigations and actions, shareholder demands and litigation related to this matter. The Company has provided notice to Wells Fargo that it may seek indemnification under the MyTerm distribution agreement between the parties.

## Broderick v. The Prudential Insurance Company of America, et al.

In December 2016, a complaint entitled Julie Han Broderick, Darron Smith and Thomas Schreck v. The Prudential Insurance Company of America, et al., was filed in the Superior Court of New Jersey, Law Division-Essex County. The complaint: (i) alleges that Defendants terminated Plaintiffs' employment for engaging in whistleblowing conduct involving the sale of MyTerm policies through Wells Fargo and violated New Jersey's Conscientious Employee Protection Act; and (ii) seeks back and front pay, compensatory and punitive damages and attorneys' fees and costs. In January 2017, Defendants filed an Answer to the Complaint.

## Alex Perea, individually and on behalf of all others similarly situated v. The Prudential Insurance Company of America, et

 al.In December 2016, a putative class action complaint entitled Alex Perea, individually and on behalf of all others similarly situated $v$. The Prudential Insurance Company of America, Pruco Life Insurance Company of New Jersey, and Pruco Life Insurance Company, was filed in the United States District Court for the District of New Jersey. The complaint: (i) alleges that Defendants conspired with Wells Fargo to sell a life insurance product to Wells Fargo customers without their knowledge or consent and violated federal law (Racketeer Influenced and Corrupt Organizations Act ("RICO")) and New Jersey law (Consumer Fraud Act); and (ii) seeks injunctive relief, compensatory damages, exemplary and statutory penalties, treble damages, interest and attorneys' fees and costs. In January 2017, plaintiff filed an amended complaint in the United States District Court for the District of New Jersey, alleging the same claims contained in the Complaint.

## Escheatment Litigation

## State of West Virginia ex. Rel. John D. Perdue v. Prudential Insurance Company of America

In September 2012, the State of West Virginia, through its State Treasurer, filed a lawsuit against Prudential Insurance in the Circuit Court of Putnam County, West Virginia. The complaint alleges violations of the West Virginia Uniform Unclaimed Property Fund Act by failing to properly identify and report all unclaimed insurance policy proceeds which should either be paid to beneficiaries or escheated to West Virginia. The complaint seeks to examine the records of Prudential Insurance to determine compliance with the West Virginia Uniform Unclaimed Property Fund Act, and to assess penalties and costs in an undetermined amount. In June 2015, the West Virginia Supreme Court issued a decision: (i) reversing the trial court's dismissal of the West Virginia Treasurer's complaint alleging violations of West Virginia's unclaimed property law; and (ii) remanding the case to the Circuit Court of Putnam County for proceedings consistent with its decision. In July 2015, a petition for rehearing was filed with the West Virginia Supreme Court. In September 2015, the West Virginia Supreme Court of Appeals denied Prudential Insurance's rehearing petition. In November 2015, Prudential Insurance filed its answer.

## State of West Virginia ex. Rel. John D. Perdue v. Pruco Life

In October 2012, the State of West Virginia commenced a second action against Pruco Life making the same allegations stated in the action against Prudential Insurance. In April 2013, Pruco Life filed motions to dismiss the complaints in both of the West Virginia actions. In December 2013, the Court granted Pruco Life's motions and dismissed the complaints with prejudice. In January 2014, the State of West Virginia appealed the decisions. In June 2015, the West Virginia Supreme Court issued a decision: (i) reversing the trial court's dismissal of the West Virginia Treasurer's complaint alleging violations of West Virginia's unclaimed property law; and (ii) remanding the case to the Circuit Court of Putnam County for proceedings consistent with its decision. In July 2015, a petition for rehearing was filed with the West Virginia Supreme Court. In September 2015, the West Virginia Supreme Court of Appeals denied Pruco Life's rehearing petition. In November 2015, Pruco Life filed its answer.

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

## Escheatment Audit and Claims Settlement Practices Market Conduct Exam

In January 2012, a Global Resolution Agreement entered into by the Company and a third-party auditor became effective upon its acceptance by the unclaimed property departments of 20 states and jurisdictions. Under the terms of the Global Resolution Agreement, the third-party auditor acting on behalf of the signatory states will compare expanded matching criteria to the Social Security Master Death File ("SSMDF") to identify deceased insureds and contractholders where a valid claim has not been made. In February 2012, a Regulatory Settlement Agreement entered into by the Company to resolve a multi-state market conduct examination regarding its adherence to state claim settlement practices became effective upon its acceptance by the insurance departments of 20 states and jurisdictions. The Regulatory Settlement Agreement applies prospectively and requires the Company to adopt and implement additional procedures comparing its records to the SSMDF to identify unclaimed death benefits and prescribes procedures for identifying and locating beneficiaries once deaths are identified. Substantially all other jurisdictions that are not signatories to the Global Resolution Agreement or the Regulatory Settlement Agreement have entered into similar agreements with the Company.

The New York Attorney General has subpoenaed the Company, along with other companies, regarding its unclaimed property procedures and may ultimately seek remediation and other relief, including damages. Additionally, the New York Office of Unclaimed Funds is conducting an audit of the Company's compliance with New York's unclaimed property laws.

## Huffman $\mathbf{v}$. The Prudential Insurance Company of America

In September 2010, Huffman v. The Prudential Insurance Company of America, a purported nationwide class action brought on behalf of beneficiaries of group life insurance contracts owned by the Employee Retirement Income Security Act ("ERISA")-governed employee welfare benefit plans was filed in the United States District Court for the Eastern District of Pennsylvania, challenging the use of retained asset accounts in employee welfare benefit plans to settle death benefit claims as a violation of ERISA and seeking injunctive relief and disgorgement of profits. In July 2011, Prudential Insurance's motion for judgment on the pleadings was denied. In February 2012, plaintiffs filed a motion to certify the class. In April 2012, the Court stayed the case pending the outcome of a case involving another insurer that is before the Third Circuit Court of Appeals. In August 2014, the Court lifted the stay, and in September 2014, Plaintiffs filed a motion seeking leave to amend the complaint. In July 2015, the Court granted plaintiffs' motion to file an amended complaint. Plaintiffs' Amended Complaint added two new class representatives, a new common law breach of fiduciary duty claim, and a prohibited transactions claim under Section 406(a)(1)(C) of ERISA. In August 2015, Prudential Insurance filed its answer to the First Amended Complaint. In February 2016, Plaintiffs filed a class certification motion. In September 2016, Plaintiffs' motion for class certification was denied, and in October 2016, Plaintiffs filed a motion for reconsideration. In December 2016, the motion for reconsideration was denied.

## Other Matters

## Securities Lending Matter

In 2016, the Company self-reported to the SEC, and notified other regulators, that in some cases it failed to maximize securities lending income due to a long-standing restriction benefiting the Company that limited the availability of loanable securities for certain separate account investments. The Company has removed the restriction and substantially implemented a remediation plan for the benefit of customers. The Company intends to complete the remediation process. The remediation plan remains subject to regulatory review and the Company is cooperating with regulators in their review of this matter.

## Wood II, et al. v. PRIAC

In December 2015, a putative class action complaint entitled, Leonard D. Wood II on behalf of the KeHe Distributors, Inc. 401(k) Retirement Saving Non-Union Plan and Maya Shaw on behalf of the Exco Resources, Inc. 401(k) Plan and all other similarly situated ERISA-covered employee pension benefit plans v. PRIAC was filed in the United States District Court, District of Connecticut. The complaint: (i) seeks certification of a class of all ERISA-covered employee pension benefit plans whose plan assets were invested in group annuity contract stable value funds within six years prior to, on, or after December 3, 2015; and (ii) alleges that PRIAC breached its fiduciary obligations and accepted excessive compensation by crediting rates on the stable value accounts that are less than PRIAC's internal rate of return on those plan assets without disclosing this spread to the plans. In February 2016, PRIAC filed a motion to dismiss the complaint. In September 2016, the Court issued a decision: (i) denying PRIAC's motion to dismiss the claim alleging that it is a fiduciary under ERISA; and (ii) granting PRIAC's motion to dismiss the claim alleging non-fiduciary liability. In October 2016, PRIAC filed its Answer. In January 2017, Plaintiffs filed a motion for class certification. In February 2017, the court granted the unopposed motion of plaintiff Wood on behalf of the KeHe plan to dismiss the case as to the KeHe plan without prejudice.

## Muir v. PRIAC, et al.

In February 2016, a putative class action complaint entitled Randall C. Muir, on behalf of the Ferguson Enterprises, Inc. 401(k) Retirement Savings Plan and All Other Similarly Situated Plans v. PRIAC, Prudential Bank \& Trust, FSB, and Prudential Investment Management Services, LLC, was filed in the United States District Court, District of Connecticut. The complaint: (i) seeks certification of a class of all ERISA-covered employee pension benefit plans with which Prudential has maintained a contractual relationship based on a group annuity contract or group funding agreement; and (ii) alleges that the defendants breached their fiduciary obligations by accepting revenue sharing payments from investment vehicles in its separate accounts and/or by accepting excessive compensation by crediting rates

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

on stable value accounts that are less than PRIAC's internal rate of return. In April 2016, Plaintiff filed an unopposed motion to consolidate this lawsuit with the Rosen lawsuit. In May 2016, the Court granted the unopposed motion to consolidate the Muir and Rosen lawsuits. The Muir case has been removed from the Court's docket. In November 2016, Plaintiff filed a Notice of Voluntary Dismissal without Prejudice.

## Rosen v. PRIAC, et al.

In December 2015, a putative class action complaint entitled Richard A. Rosen, on behalf of the Ferguson Enterprises, Inc. 401(k) Retirement Savings Plan and On behalf of All Other Similarly Situated Employee Benefit Plans v. PRIAC, Prudential Bank \& Trust, FSB and Prudential Investment Management Services, LLC was filed in the United States District Court, District of Connecticut. The complaint: (i) seeks certification of a class of all ERISA-covered employee pension benefit plans with which Prudential has maintained a contractual relationship based on a group annuity contract or group funding agreement; and (ii) alleges that the defendants breached their fiduciary obligations by accepting revenue sharing payments from investment vehicles in its separate accounts and/or by accepting excessive compensation by crediting rates on stable value accounts that are less than PRIAC's internal rate of return. In April 2016, Plaintiff filed an amended complaint: (i) removing Prudential Investment Management Services, LLC, as a defendant; (ii) withdrawing all claims concerning Stable Value Accounts; and (iii) adding as defendants the employer/sponsor of Plaintiff's retirement plan (Ferguson Enterprises, Inc.), and the investment advisor for Plaintiff's retirement plan (Capital Partners, LLC d/b/a Captrust Financial Advisors). In May 2016, the Muir v. PRIAC complaint was consolidated with this lawsuit. In June 2016, PRIAC, along with the other named defendants, filed motions to dismiss the amended complaint. In December 2016, the court granted defendants' motions to dismiss with prejudice. In January 2017, Plaintiffs filed a Notice of Appeal to the Second Circuit.

## North Valley GI Medical Group v. Prudential Investments LLC

In October 2015, an action was filed in the U.S. District Court for the District of Maryland bearing the caption North Valley GI Medical Group, et al. v. Prudential Investments LLC. This complaint is brought by shareholders in six different mutual funds, and alleges that Prudential Investments breached its fiduciary duty by receiving excessive investment advisory fees from each of the funds. The complaint seeks injunctive relief, compensatory damages, rescission of Prudential Investments' management agreements with the funds, and attorneys' fees and costs. In January 2016, Prudential Investments filed a motion to dismiss the complaint. In August 2016, the Court denied the motion to dismiss the complaint. In February 2017, the parties entered into a Stipulation of Dismissal with Prejudice.

## Bouder v. PFI

In October 2006, a purported class action lawsuit, Bouder v. Prudential Financial, Inc. and Prudential Insurance Company of America, was filed in the United States District Court for the District of New Jersey, claiming that Prudential failed to pay overtime to insurance agents in violation of federal and Pennsylvania law, and that improper deductions were made from these agents' wages in violation of state law. The complaint sought back overtime pay and statutory damages, recovery of improper deductions, interest, and attorneys' fees. In March 2008, the court conditionally certified a nationwide class on the federal overtime claim. Separately, in March 2008, a purported nationwide class action lawsuit was filed in the United States District Court for the Southern District of California, Wang v. Prudential Financial, Inc. and Prudential Insurance, claiming that the Company failed to pay its agents overtime and provide other benefits in violation of California and federal law and seeking compensatory and punitive damages in unspecified amounts. In September 2008, Wang was transferred to the United States District Court for the District of New Jersey and consolidated with the Bouder matter. Subsequent amendments to the complaint resulted in additional allegations involving purported violations of an additional nine states' overtime and wage payment laws. In February 2010, Prudential moved to decertify the federal overtime class that had been conditionally certified in March 2008 and moved for summary judgment on the federal overtime claims of the named plaintiffs. In July 2010, plaintiffs filed a motion for class certification of the state law claims. In August 2010, the district court granted Prudential's motion for summary judgment, dismissing the federal overtime claims. In January 2013, the Court denied plaintiffs' motion for class certification in its entirety. In July 2013, the Court granted plaintiffs' motion for reconsideration, permitting plaintiffs to file a motion to certify a class of employee insurance agents seeking recovery under state wage and hour laws. In September 2013, plaintiffs filed a renewed motion for class certification. In February 2015, the federal District Court for New Jersey granted in part, and denied in part, plaintiffs' renewed class certification motion. It certified for class treatment plaintiffs' wage payment claims which include allegations that the Company made improper deductions from the wages of its former common law agents in California, New York, and Pennsylvania, and its financial services associates in California and New York. The Court denied plaintiffs' attempt to certify a class based on the Company's alleged failure to pay overtime to its former common law agents and its financial services associates in California, Illinois, New York and Pennsylvania. In March 2015, the Company filed a motion requesting that the Court reconsider its decision to partially grant plaintiffs' renewed class certification motion with regard to its former common law agents.

## Financial Disclosures Concerning Death Benefits and Unclaimed Property

## City of Sterling Heights General Employees' Retirement System v. Prudential Financial, Inc., et al.

In August 2012, a purported class action lawsuit, was filed in the United States District Court for the District of New Jersey, alleging violations of federal securities law. The complaint names as defendants the Company's Chief Executive Officer, the Chief Financial Officer, the Principal Accounting Officer and certain members of the Company's Board of Directors. The complaint alleges that knowingly false and misleading statements were made regarding the Company's current and future financial condition based on, among other things, the alleged failure to disclose: (i) potential liability for benefits that should either have been paid to policyholders or their beneficiaries, or escheated to applicable states; and (ii) the extent of the Company's exposure for alleged state and federal law violations concerning the

## PRUDENTIAL FINANCIAL, INC.

## Notes to Consolidated Financial Statements

settlement of claims and the escheatment of unclaimed property. The complaint seeks an undetermined amount of damages, interest, attorneys' fees and costs. In May 2013, the complaint was amended to add three additional putative institutional investors as lead plaintiffs: National Shopmen Pension Fund, The Heavy \& General Laborers' Locals 472 \& 172 Pension \& Annuity Funds, and Roofers Local No. 149 Pension Fund. In June 2013, the Company moved to dismiss the amended complaint. In February 2014, the Court denied the Company's motion to dismiss. In July 2014, plaintiffs' filed a motion to certify a class comprised of investors who purchased shares of the Company's Common Stock between May 5, 2010 and November 4, 2011. That motion was subsequently withdrawn and refiled in December 2014. In August 2015, Plaintiffs' class certification motion was granted. In September 2015, defendants filed a petition with the United States Court of Appeals for the Third Circuit seeking permission to file an appeal from the order certifying a class. In January 2016, the defendants' petition to file an appeal was granted. In April 2016, the parties entered into a proposed agreement to resolve the class action claims asserted in the amended complaint. Thereafter, Plaintiffs filed a motion for an order preliminarily approving the settlement in accordance with the parties' April 2016 Stipulation of Settlement. In June 2016, the Court issued an order "preliminarily approving settlement and providing for notice." In September 2016, the Court issued a final judgment approving the settlement and dismissed the amended complaint with prejudice.

## Stephen Silverman, Derivatively on Behalf of Prudential Financial, Inc. v. John R. Strangfeld, et al.

In October 2012, a shareholder derivative lawsuit, was filed in the United States District Court for the District of New Jersey, alleging breaches of fiduciary duties, waste of corporate assets and unjust enrichment by certain senior officers and directors. The complaint names as defendants the Company's Chief Executive Officer, the Chief Financial Officer, the Principal Accounting Officer, certain members of the Company's Board of Directors and a former Director. The complaint alleges that the defendants made false and misleading statements regarding the Company's current and future financial condition based on, among other things, the alleged failure to disclose: (i) potential liability for benefits that should either have been paid to policyholders or their beneficiaries, or escheated to applicable states; and (ii) the extent of the Company's exposure for alleged state and federal law violations concerning the settlement of claims and the escheatment of unclaimed property. The complaint seeks an undetermined amount of damages, attorneys' fees and costs, and equitable relief including a direction for the Company to reform and to improve its corporate governance and internal procedures to comply with applicable laws.

## Paul Memo, Derivatively on Behalf of Prudential Financial, Inc. v. John R. Strangfeld, et al.

In October 2012, the Board of Directors received a shareholder demand letter (the "Demand"), containing allegations of wrongdoing similar to those alleged in the Silverman complaint. The Demand alleges that the Company's Senior Management: (i) breached their fiduciary duties of loyalty and good faith in connection with the management, operation and oversight of the Company's business; (ii) breached their fiduciary duty of good faith to establish and maintain adequate internal controls; and (iii) breached their fiduciary duties by disseminating false, misleading and/or incomplete information, all in connection with the Company's alleged failure to use the SSDMF and to pay beneficiaries and escheat funds to states. The Demand requests that the Board of Directors: (a) undertake an independent internal investigation into Senior Management's violations of New Jersey and/or federal law; and (b) commence a civil action against each member of Senior Management to recover for the benefit of the Company the amount of damages sustained by the Company as a result of the alleged breaches described above. In response to the Demand, the Board of Directors formed a Special Litigation Committee that retained an outside law firm to investigate the Demand's allegations. In September 2013, before the conclusion of the Special Litigation Committee's investigation, the shareholder who submitted the Demand filed a shareholder derivative lawsuit, Paul Memo, Derivatively on Behalf of Prudential Financial, Inc. v. John R. Strangfeld et. al., in New Jersey Superior Court, Essex County. The complaint (the "Memo complaint") names as defendants the Company's Chief Executive Officer, the Vice Chairman, a former Chief Financial Officer, the Principal Accounting Officer, certain members of the Company's Board of Directors and a former Director. The complaint repeats the allegations in the Demand and seeks an undetermined amount of damages, attorneys' fees and costs, and equitable relief including a direction for the Company to reform and to improve its corporate governance and internal procedures to comply with applicable laws. In March 2014, the Special Litigation Committee completed its investigation into the Demand's allegations and concluded that it is neither appropriate nor in the best interests of the Company's shareholders to pursue any litigation arising from allegations contained in the Demand or in the Memo complaint, and that the Company should seek dismissal of the Memo complaint. In July 2014, the Company filed a motion to dismiss the complaint. In October 2015, the Court granted defendants' summary judgment motion and dismissed the complaint with prejudice. In November 2015, plaintiff filed a notice of appeal to the New Jersey Superior Court—Appellate Division.

## Residential Mortgage-Backed Securities ("RMBS") Trustee Litigation

In June 2014, the Company, together with nine other institutional investors, filed six actions in New York state court against certain RMBS trustees. The actions, which are brought derivatively on behalf of more than 2,200 RMBS trusts, seek unspecified damages attributable to the trustees' alleged failure to: (i) enforce the trusts' respective repurchase rights against sellers of defective mortgage loans; and (ii) properly monitor the respective mortgage loan servicers. The complaints assert claims for breach of contract, breach of fiduciary duty, negligence and violations of the Trust Indenture Act of 1939. In July 2014, the Company amended its complaint against each of the six defendants. In November 2014, the Company filed amended complaints against each of the trustee bank defendants in federal court in the Southern District of New York. In December 2014, the New York State court actions were dismissed without prejudice upon the Company's request. The six actions described above are captioned:

PICA et al. v. Bank of New York Mellon ("BONYM")—In March 2015, defendants filed a motion to dismiss the amended complaint. In March 2016, the Court issued a decision involving BONYM's motion to dismiss: (i) denying the motion to dismiss the Pooling and Servicing Agreement ("PSA") trust claims for lack of jurisdiction; (ii) denying the motion regarding claims for violations of the Trust Indenture Act of 1939 and breach of contract; and (iii) granting the motion regarding claims for negligence and breach of fiduciary duty.

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PICA et al. v. Citibank N.A.-In February 2015, defendants filed a motion to dismiss the amended complaint. In September 2015, the Court issued a decision involving Citibank's motion to dismiss: (i) with respect to the PSA trusts, granting the motion and declining to exercise supplemental jurisdiction; (ii) with respect to the Indenture trusts, denying the motion regarding claims for breach of contract, violations of the Trust Indenture Act of 1939, negligence and breach of fiduciary duty concerning the duty to avoid conflicts of interest; and (iii) with respect to the Indenture trusts, granting the motion to dismiss claims for negligence and breach of fiduciary duty concerning the duty of care. In November 2015, the Company, together with other institutional investors, filed a complaint in New York State Supreme Court, captioned Fixed Income Shares: Series M, et al. v. Citibank N.A., asserting claims relating to the PSA trusts. In February 2016, Citibank filed a motion to dismiss the state court complaint. In August 2016, Plaintiffs filed an amended complaint in state court, and in September 2016, Citibank filed a motion to dismiss the amended complaint and plaintiffs filed in Federal Court a motion for class certification.

PICA et al. v. Deutsche Bank, et al.-In April 2015, defendants filed a motion to dismiss the amended complaint. In January 2016, the Court issued a decision involving Deutsche Bank's motion to dismiss: (i) with respect to the PSA trusts, granting the motion and declining to exercise supplemental jurisdiction; and (ii) with respect to the Indenture trusts, granting leave for Plaintiffs to file an amended complaint. In February 2016, the Company, together with other institutional investor plaintiffs, filed an amended complaint in federal court. In March 2016, the Company, together with other institutional investors, filed a complaint in California State Superior Court, captioned BlackRock Balanced Capital Portfolio (FI), et al. v. Deutsche Bank Trust Company Americas, asserting claims relating to the PSA trusts. In May 2016, the Company, together with other institutional investors, filed an amended class action complaint in California State Superior Court. In July 2016, Defendant filed a motion to dismiss the amended federal court complaint. In August 2016, Defendant filed a demurrer and motion to strike the amended state court class action complaint. In October 2016, the Court issued a decision regarding Defendants motion to dismiss: (i) sustaining Plaintiffs' breach of contract claims concerning the trust at issue; (ii) dismissing Plaintiffs' tort claims for breach of fiduciary duty; and (iii) dismissing Plaintiffs' claims of breach of duty to avoid conflicts of interest. The Court granted Plaintiffs' leave to file an amended complaint. In January 2017, the federal court issued a decision involving Deutsche Bank's motion to dismiss: (i) granting the motion with respect to Plaintiff's conflicts of interest claims; and (ii) denying the motion with respect to Plaintiffs' representations-and-warranties claims, servicer-notification claims, event-of-default claims and Trust Indenture Act claims.

PICA et al. v. HSBC, et al.-In January 2015, defendants filed a motion to dismiss the amended complaint. In June 2015, the Court granted in part, and denied in part, defendants' motion to dismiss the complaint for failure to state a claim and granted leave to file an amended complaint. In July 2015, plaintiffs filed an amended complaint.

PICA et al. v. U.S. Bank National Association-In February 2015, defendants filed a motion to dismiss the amended complaint. In May 2015, the Court granted defendants' motion to dismiss: (i) declining to exercise supplemental jurisdiction regarding claims involving the PSA trusts; and (ii) granting leave for plaintiffs to file an amended complaint asserting direct claims involving the Indenture trusts. In June 2015, the Company, together with other institutional investors, filed a complaint in New York State Supreme Court, captioned BlackRock Balanced Capital Portfolio (FI), et al. v. U.S. Bank Nat'l Ass'n, asserting claims relating to the PSA trusts. In July 2015, plaintiffs filed with the Court an amended complaint asserting direct claims relating to the Indenture trusts. In August 2015, defendant filed a motion to dismiss the amended class action complaint in the federal court action. In September 2015, defendant filed a motion to dismiss the class action complaint in the state court action. In February 2016, the federal district court issued a decision involving U.S. Bank's motion to dismiss: (i) upholding the breach of contract and Trust Indenture Act claims; and (ii) dismissing the breach of fiduciary duty and extra-contractual claims. In September 2016, the Company together with other institutional investor plaintiffs filed an amended complaint in state court. In October 2016, U.S. Bank filed a motion to dismiss the amended state court complaint. In November 2016, Plaintiffs filed in federal court motions seeking class certification and appointing class representatives and class counsel.

PICA et al. v. Wells Fargo Bank, et al.-In April 2015, defendants filed a motion to dismiss the amended complaint. In January 2016, the Court issued a decision involving Wells Fargo's motion to dismiss: (i) with respect to the PSA trusts, granting the motion and declining to exercise supplemental jurisdiction; and (ii) with respect to the Indenture trusts, granting leave for plaintiffs to file an amended complaint. In February 2016, the Company, together with other institutional investor plaintiffs, filed an amended complaint in federal court. In March 2016, the Company, together with other institutional investors, filed a complaint in California State Superior Court, captioned BlackRock Balanced Capital Portfolio (FI), et al. v. Wells Fargo Bank, Nat'l Ass'n., asserting claims relating to the PSA trusts. In May 2016, Defendant filed a motion to dismiss or to stay the state court action. In July 2016, Defendant filed a motion to dismiss the amended complaint filed previously in federal court. In October 2016, the Court dismissed the state court complaint. In December 2016, the Company, together with other institutional investors, filed a complaint in New York State Court, captioned BlackRock Core Bond Portfolio, et al. v. Wells Fargo Bank, Nat'l Ass'n., asserting claims related to the PSA trusts.

## Prudential Investment Portfolios 2, f/k/a Dryden Core Investment Fund, o/b/o Prudential Core Short-Term Bond Fund and Prudential Core Taxable Money Market Fund v. Bank of America Corporation, et al.

In May 2014, Prudential Investment Portfolios 2, on behalf of the Prudential Core Short-Term Bond Fund and the Prudential Core Taxable Money Market Fund (the "Funds"), filed an action against ten banks in the United States District Court for the District of New Jersey asserting that the banks participated in the setting of LIBOR, a major benchmark interest rate. The Complaint alleges that the defendant banks manipulated LIBOR, and asserts, among other things, claims for common law fraud, negligent misrepresentation, breach of contract, intentional interference with contract and with prospective economic relations, unjust enrichment, breaches of the New Jersey Civil RICO statute, and violations of the Sherman Act. In June 2014, the United States Judicial Panel on Multidistrict Litigation transferred the action to the United States District Court for the Southern District of New York, where it has been consolidated for pre-trial purposes

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## Notes to Consolidated Financial Statements

with other pending LIBOR-related actions. In October 2014, the Funds filed an amended complaint. In November 2014, the defendants filed a motion to dismiss the amended complaint. In August 2015, the Court issued a decision granting in part, and denying in part, defendants' motions to dismiss. The Court dismissed certain of the Funds' claims, including those alleging fraud based on offering material statements; New Jersey RICO; and express breach of contract. The Court upheld certain of the Funds' claims, including those alleging fraud based on false LIBOR submissions to the British Bankers' Association; negligent misrepresentation; unjust enrichment; and breach of the implied covenant of good faith and fair dealing. Following the August 2015 decision, granting in part defendants' motions to dismiss, in September 2015, Prudential filed the following LIBOR complaints: (i) in the Southern District of New York, captioned Prudential Investment Portfolios 2 et al. v. Barclays Bank PLC, et al. (the "New York Complaint"), naming as defendants Barclays Bank PLC, Barclays Capital Inc., Barclays PLC, Citibank, N.A., Citigroup Funding Inc., Credit Suisse AG, Credit Suisse Group AG, Credit Suisse (USA) Inc., Deutsche Bank AG, HSBC Bank plc, HSBC Holdings PLC, JPMorgan Chase \& Co., JPMorgan Chase Bank, N.A., Royal Bank of Canada, and The Royal Bank of Scotland PLC. These defendants were dismissed from the original LIBOR action on jurisdictional grounds. The New York Complaint reasserts the causes of action brought in the original LIBOR action; and (ii) in the Western District of North Carolina, captioned Prudential Investment Portfolios 2 et al. v. Bank of America Corporation et al. (the "North Carolina Complaint"), naming as defendants Bank of America Corporation and Bank of America, N.A. These defendants were dismissed from the original LIBOR action on jurisdictional grounds. The North Carolina Complaint reasserts the causes of action brought in the original LIBOR action. Both the New York Complaint and the North Carolina Complaint have been transferred for pre-trial purposes to the LIBOR multi-district litigation presided over by Judge Buchwald in the U.S. District Court for the Southern District of New York. In May 2016, the Second Circuit Court of Appeals vacated the District Court's dismissal of the Libor Plaintiffs' antitrust claims and remanded to the District Court the question of whether Plaintiffs possess standing as "efficient enforcers" of applicable antitrust laws. In July 2016, Defendants filed a joint motion to dismiss all antitrust claims based on lack of standing and lack of personal jurisdiction. In December 2016, the motion was granted in part and denied in part. In January 2017, the United States Supreme Court denied Defendants' petition for certiorari.


#### Abstract

\section*{Summary}

The Company's litigation and regulatory matters are subject to many uncertainties, and given their complexity and scope, their outcome cannot be predicted. It is possible that the Company's results of operations or cash flow in a particular quarterly or annual period could be materially affected by an ultimate unfavorable resolution of pending litigation and regulatory matters depending, in part, upon the results of operations or cash flow for such period. In light of the unpredictability of the Company's litigation and regulatory matters, it is also possible that in certain cases an ultimate unfavorable resolution of one or more pending litigation or regulatory matters could have a material adverse effect on the Company's financial position. Management believes, however, that, based on information currently known to it, the ultimate outcome of all pending litigation and regulatory matters, after consideration of applicable reserves and rights to indemnification, is not likely to have a material adverse effect on the Company's financial position.


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## Notes to Consolidated Financial Statements

## 24. QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The unaudited quarterly results of operations for the years ended December 31, 2016 and 2015 are summarized in the table below:

(1) Quarterly earnings per share amounts may not add to the full year amounts due to the averaging of shares.

Results for the second quarter of 2016 included total pre-tax out of period adjustments of $\$ 153$ million which primarily consisted of a charge of $\$ 148$ million to increase reserves, net of a related increase in DAC, for certain universal life products within the Individual Life business. Management evaluated the adjustment and concluded it was not material to the second quarter or to any previously reported quarterly or annual financial statements.

## 25. SUBSEQUENT EVENTS

## Common Stock Dividend Declaration

On February 8, 2017, Prudential Financial's Board of Directors declared a cash dividend of $\$ 0.75$ per share of Common Stock, payable on March 16, 2017 to shareholders of record as of February 22, 2017.

## MARKET PRICE OF AND DIVIDENDS ON COMMON EQUITY, AND RELATED STOCKHOLDER MATTERS

Prudential Financial's Common Stock trades on the New York Stock Exchange under the symbol "PRU." The following table presents the high and low closing prices for the Common Stock on the New York Stock Exchange during the periods indicated and the dividends declared per share during such periods:

|  | High | Low | Dividends |
| :---: | :---: | :---: | :---: |
| 2016: |  |  |  |
| Fourth Quarter | \$107.10 | \$81.43 | \$0.70 |
| Third Quarter | \$ 81.65 | \$68.74 | \$0.70 |
| Second Quarter | \$ 79.71 | \$66.93 | \$0.70 |
| First Quarter | \$ 79.84 | \$58.00 | \$0.70 |
| 2015: |  |  |  |
| Fourth Quarter . | \$ 87.69 | \$75.40 | \$0.70 |
| Third Quarter | \$ 91.68 | \$74.22 | \$0.58 |
| Second Quarter | \$ 91.47 | \$79.13 | \$0.58 |
| First Quarter | \$ 90.11 | \$75.32 | \$0.58 |

On January 31, 2017, there were 1,344,180 registered holders of record for the Common Stock and 430 million shares outstanding.
Holders of Common Stock will be entitled to dividends if and when declared by Prudential Financial's Board of Directors out of funds legally available to pay those dividends. Prudential Financial's Board of Directors currently intends to continue to declare and pay dividends on the Common Stock. Future dividend decisions will be based on, and affected by, a number of factors including the financial performance of our businesses, our overall financial condition, results of operations, cash requirements and future prospects; regulatory restrictions including on the payment of dividends by Prudential Financial's subsidiaries and capital and liquidity requirements under Dodd-Frank; and such other factors as the Board of Directors may deem relevant. Dividends payable by Prudential Financial are limited to the amount that would be legally available for payment under New Jersey corporate law. For additional information on dividends and related regulatory restrictions, see Note 15 to the Consolidated Financial Statements. For information about our exchangeable surplus notes, see Note 14 to the Consolidated Financial Statements.

## PERFORMANCE GRAPH

The following graph, which covers the period from the closing price on December 31, 2011 through the closing price on December 31, 2016, compares the cumulative total shareholder return on Prudential Financial's Common Stock with the cumulative total shareholder return on (i) the Standard \& Poor's ("S\&P") 500 Index, and (ii) a Financial Services Composite Index, which is the average of the S\&P 500 Life \& Health Insurance and S\&P 500 Diversified Financials indices. The figures presented below assume the reinvestment of all dividends into shares of common stock and an initial investment of $\$ 100$ at the closing prices on December 31, 2011.

|  | ANNUAL RETURN PERCENTAGEYears Ending |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Company / Index | Dec12 | Dec13 | Dec14 | Dec15 | Dec16 |
| Prudential Financial, Inc | 9.67 | 77.17 | 0.61 | -7.34 | 32.38 |
| S\&P 500 Index | 16.00 | 32.39 | 13.69 | 1.38 | 11.96 |
| Financial Services Composite Index | 27.97 | 52.43 | 9.26 | -7.70 | 22.70 |

Comparison of Cumulative Five Year Total Return


| Company / Index | INDEXED RETURNS Years Ending |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec11 | Dec12 | Dec13 | Dec14 | Dec15 | Dec16 |
| Prudential Financial, Inc. | 100 | 109.67 | 194.30 | 195.49 | 181.14 | 239.80 |
| S\&P 500 Index | 100 | 116.00 | 153.57 | 174.60 | 177.01 | 198.18 |
| Financial Services Composite Index | 100 | 127.97 | 195.06 | 213.12 | 196.70 | 241.36 |

## FORWARD-LOOKING STATEMENTS

Certain of the statements included in this Annual Report on Form 10-K, including but not limited to those in Management's Discussion and Analysis of Financial Condition and Results of Operations, constitute forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Words such as "expects," "believes," "anticipates," "includes," "plans," "assumes," "estimates," "projects," "intends," "should," "will," "shall" or variations of such words are generally part of forward-looking statements. Forward-looking statements are made based on management's current expectations and beliefs concerning future developments and their potential effects upon Prudential Financial, Inc. and its subsidiaries. There can be no assurance that future developments affecting Prudential Financial, Inc. and its subsidiaries will be those anticipated by management. These forward-looking statements are not a guarantee of future performance and involve risks and uncertainties, and there are certain important factors that could cause actual results to differ, possibly materially, from expectations or estimates reflected in such forward-looking statements, including, among others: (1) general economic, market and political conditions, including the performance and fluctuations of fixed income, equity, real estate and other financial markets; (2) the availability and cost of additional debt or equity capital or external financing for our operations; (3) interest rate fluctuations or prolonged periods of low interest rates; (4) the degree to which we choose not to hedge risks, or the potential ineffectiveness or insufficiency of hedging or risk management strategies we do implement; (5) any inability to access our credit facilities; (6) reestimates of our reserves for future policy benefits and claims; (7) differences between actual experience regarding mortality, morbidity, persistency, utilization, interest rates or market returns and the assumptions we use in pricing our products, establishing liabilities and reserves or for other purposes; (8) changes in our assumptions related to deferred policy acquisition costs, value of business acquired or goodwill; (9) changes in assumptions for our pension and other post-retirement benefit plans; (10) changes in our financial strength or credit ratings; (11) statutory reserve requirements associated with term and universal life insurance policies under Regulation XXX, Guideline AXXX and principles-based reserving requirements; (12) investment losses, defaults and counterparty non-performance; (13) competition in our product lines and for personnel; (14) difficulties in marketing and distributing products through current or future distribution channels; (15) changes in tax law; (16) economic, political, currency and other risks relating to our international operations; (17) fluctuations in foreign currency exchange rates and foreign securities markets; (18) regulatory or legislative changes, including the Dodd-Frank Wall Street Reform and Consumer Protection Act and the U.S. Department of Labor's fiduciary rules; (19) inability to protect our intellectual property rights or claims of infringement of the intellectual property rights of others; (20) adverse determinations in litigation or regulatory matters, and our exposure to contingent liabilities, including related to the remediation of certain securities lending activities administered by the Company; (21) domestic or international military actions, natural or man-made disasters including terrorist activities or pandemic disease, or other events resulting in catastrophic loss of life; (22) ineffectiveness of risk management policies and procedures in identifying, monitoring and managing risks; (23) possible difficulties in executing, integrating and realizing projected results of acquisitions, divestitures and restructurings; (24) interruption in telecommunication, information technology or other operational systems or failure to maintain the security, confidentiality or privacy of sensitive data on such systems; (25) changes in accounting principles, practices or policies; and (26) Prudential Financial, Inc.'s primary reliance, as a holding company, on dividends or distributions from its subsidiaries to meet debt payment obligations and the ability of the subsidiaries to pay such dividends or distributions in light of our ratings objectives and/or applicable regulatory restrictions. Prudential Financial, Inc. does not intend, and is under no obligation, to update any particular forward-looking statement included in this document. See "Risk Factors" included in Prudential Financial's 2016 Annual Report on Form 10-K for discussion of certain risks relating to our businesses and investment in our securities.

## EXECUTIVE OFFICERS

John R. Strangfeld
Chairman of the Board, Chief Executive Officer and President

Mark B. Grier
Vice Chairman
Robert M. Falzon
Executive Vice President and Chief Financial Officer

Timothy P. Harris
Executive Vice President and General Counsel

## Charles F. Lowrey

Executive Vice President and Chief Operating Officer, International Businesses

## Stephen Pelletier

Executive Vice President and Chief Operating Officer, U.S. Businesses

Barbara G. Koster
Senior Vice President and Chief Information Officer

Richard F. Lambert
Senior Vice President and Chief Actuary
Nicholas C. Silitch Senior Vice President and Chief Risk Officer
Scott G. Sleyster
Senior Vice President and Chief Investment Officer
Sharon C. Taylor Senior Vice President, Human Resources

## BOARD OF DIRECTORS

Thomas J. Baltimore Jr. President and Chief Executive Officer, Park Resorts \& Hotels, Inc.
Gilbert F. Casellas Chairman, OMNITRU
James G. Cullen Former President and Chief Operating Officer, Bell Atlantic Corporation

Mark B. Grier<br>Vice Chairman, Prudential Financial, Inc.<br>\section*{Martina T. Hund-Mejean}<br>Chief Financial Officer, MasterCard Worldwide

Karl J. Krapek
Former President and Chief Operating Officer, United Technologies Corporation
Peter R. Lighte
Former Vice Chairman of J.P. Morgan Corporate Bank and Founding Chairman of J.P. Morgan Chase Bank, China

## George Paz

Non-Executive Chairman and Former Chief Executive Officer, Express Scripts Holding Company

## Sandra Pianalto

Former President and Chief Executive Officer, Federal Reserve Bank of Cleveland

## Christine A. Poon

Professor, The Max M. Fisher
College of Business, The Ohio State University

## Douglas A. Scovanner

Founder and Managing
Member, Comprehensive
Financial Strategies, LLC
John R. Strangfeld
Chairman of the Board, Chief Executive Officer and President, Prudential Financial, Inc.
Michael A. Todman
Former Vice Chairman, Whirlpool Corporation

## SHAREHOLDER INFORMATION

## Corporate Office

Prudential Financial, Inc.
751 Broad Street, Newark, NJ 07102
973-802-6000

## Stock Exchange Listing

The Common Stock of Prudential Financial, Inc. is traded on the New York Stock Exchange under the symbol "PRU."

## Shareholder Services at Computershare

Computershare Trust Company, N.A., the transfer agent for Prudential Financial, Inc., can assist registered shareholders with a variety of services, including:

- Convenient liquidation of shares
- Direct deposit of dividends
- Consolidating your shares into your brokerage account
- Changing the ownership of your shares
- Change of address

Now you can receive electronic delivery of all shareholder communications from Computershare, including the annual report and proxy materials, tax forms and other statements. By selecting this option, you are partnering with us to minimize our impact on the environment.

For more information, contact Computershare directly:

- Online: www.computershare.com/investor
- By phone: within the United States at 800-305-9404, outside the United States at 732-512-3782
- By mail: Computershare Trust Company, N.A.
P.O. Box 43033, Providence, RI 02940-3033

Did you know you can also transfer shares registered at Computershare to your broker? Please contact your broker for additional information.

## Annual Meeting

Shareholders are invited to attend Prudential Financial, Inc.'s annual meeting, which will be held on May 9, 2017, beginning at 2:30 p.m. at our corporate headquarters. You may listen to the annual meeting on the internet by visiting www.investor.prudential.com. Additional information about the meeting can be found in the proxy statement.
Information about Prudential Financial, Inc.
You can contact Prudential Financial, Inc.'s Corporate Information Service at 877-998-7625 at any time to obtain or listen to financial results or news releases. In addition, you may request a copy of our Annual Report on Form 10-K, which we will send to you without charge. You may also access our news releases, financial information and reports filed with the Securities and Exchange Commission (for example, our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, and our Current Reports on Form $8-\mathrm{K}$ and any amendments to those forms) online at
www.investor.prudential.com. Copies of current documents on our website are available without charge, and reports filed with or furnished to the Securities and Exchange Commission will be available as soon as reasonably practicable after they are filed with or furnished to the Commission.

## Investor Relations

Institutional investors, analysts and other members of the professional financial community can contact our Investor Relations department via e-mail at investor.relations@prudential.com, or by visiting the Investor Relations website at www.investor.prudential.com.

## Visit Prudential Financial, Inc. Online

For more information about our corporate governance, as well as to access information for shareholders and information about our company, visit our website at www.prudential.com/governance.


## $\odot$ <br> KPPRU


[^0]:    *AOI, adjusted book value, as well as operating return on equity, which is based on AOI and adjusted book value, are non-GAAP measures. See footnote (1) on page 5 and footnote (A) on page 8 for further description of AOI. See footnote (1) on page 5 and footnote (C) on page 8 for further description of adjusted book value and operating return on equity.

[^1]:    (1) Includes variable and fixed annuities sold as retail investment products. Investments sold through defined contribution plan products are included with such products within the Retirement segment. Variable annuity account values were $\$ 153.3$ billion, $\$ 149.4$ billion and $\$ 155.1$ billion as of December 31, 2016, 2015 and 2014, respectively. Fixed annuity account values were $\$ 3.5$ billion, $\$ 3.5$ billion and $\$ 3.6$ billion as of December 31, 2016, 2015 and 2014, respectively.

[^2]:    (1) During 2016, fixed maturity prepayment fees and call premiums were reclassified to "Net investment income." Prior periods were not restated. The impact of this change was immaterial.
    (2) Excludes the portion of OTTI recorded in "Other comprehensive income (loss)," representing any difference between the fair value of the impaired debt security and the net present value of its projected future cash flows at the time of impairment.
    (3) Excludes OTTI and credit-related losses through sales of investments due to expected near-term credit conditions of an underlying issuer.

[^3]:    (1) Yields are based on quarterly average carrying values except for fixed maturities, equity securities and securities lending activity. Yields for fixed maturities are based on amortized cost. Yields for equity securities are based on cost. Yields for fixed maturities and short-term investments and cash equivalents are calculated net of liabilities and rebate expenses corresponding to securities lending activity. Yields exclude investment income on assets other than those included in invested assets.
    (2) Includes investment income of our asset management operations and derivative operations.

[^4]:    (1) Investment data has been classified based on standard industry categorizations for domestic public holdings and similar classifications by industry for all other holdings.
    (2) Includes $\$ 380$ million of gross unrealized gains and $\$ 0$ million of gross unrealized losses as of December 31, 2016, compared to $\$ 316$ million of gross unrealized gains and $\$ 0$ million of gross unrealized losses as of December 31, 2015, on securities classified as held-to-maturity.
    (3) As of both December 31, 2016 and 2015, based on amortized cost, $76 \%$ represent Japanese government bonds held by our Japanese insurance operations, with no other individual country representing more than $9 \%$ of the balance.

[^5]:    (1) The table above provides ratings as assigned by nationally recognized rating agencies as of December 31, 2016.

[^6]:    (1) See Note 5 for details of balances associated with variable interest entities.
    (2) Prior period amounts are presented on a basis consistent with the current period presentation, reflecting the adoption of ASU 2015-03. See Note 2 for additional information.

[^7]:    (1) Excludes notes with amortized cost of $\$ 1,456$ million (fair value, $\$ 1,456$ million), which have been offset with the associated payables under a netting agreement.
    (2) Includes credit-tranched securities collateralized by sub-prime mortgages, auto loans, credit cards, education loans and other asset types.
    (3) Includes publicly-traded agency pass-through securities and collateralized mortgage obligations.
    (4) Represents the amount of OTTI losses in AOCI, which were not included in earnings. Amount excludes $\$ 649$ million of net unrealized gains on impaired available-for-sale securities and $\$ 1$ million of net unrealized gains on impaired held-to-maturity securities relating to changes in the value of such securities subsequent to the impairment measurement date.
    (5) Excludes notes with amortized cost of $\$ 4,403$ million (fair value, $\$ 4,403$ million), which have been offset with the associated payables under a netting agreement.

[^8]:    (1)

    Includes loans held at fair value.

[^9]:    (1) Recorded investment reflects the carrying value gross of related allowance.

[^10]:    (1) Incurred guarantee benefits include the portion of assessments established as additions to reserves as well as changes in estimates affecting the reserves. Also includes changes in the fair value of features considered to be derivatives.
    (2) Other primarily represents foreign currency translation.
    (3) Prior period amounts are presented on a basis consistent with the current period presentation.

[^11]:    (1) Represents the initial date on which the notes can be redeemed at par solely at the option of the Company, subject in the case of $8.88 \%$ notes to compliance with a replacement capital covenant.

[^12]:    (1) Represents "transfers in" related to the portion of OTTI losses recognized during the period that were not recognized in earnings for securities with no prior OTTI loss.

[^13]:    (1) These categories invest in U.S. equity funds whose objective is to track or outperform various indexes.
    (2) This category invests in a large cap international equity funds whose objective is to track an index.
    (3) This category invests in international equity funds, primarily large cap, whose objective is to outperform various indexes. This category also includes a global equity fund, primarily focused on new market leaders with sustainable competitive advantage.
    (4) This category invests in an international equity fund whose objective is to track an index.
    (5) This category invests in bond funds, primarily highly rated private placement securities.
    (6) This category invests in bond funds, primarily highly rated public securities whose objective is to outperform an index.
    (7) This category invests in bond funds, primarily highly rated corporate securities.
    (8) This category invests in highly rated corporate securities.
    (9) This category invests in highly rated Collateralized Mortgage Obligations.
    (10) Primarily cash and cash equivalents, short-term investments, payables and receivables, and open future contract positions (including fixed income collateral).
    (11) The contractual net value of the investment of securities lending collateral invested in primarily short-term bond funds is $\$ 627$ million and the liability for securities lending collateral is $\$ 627$ million.
    (12) This category invests in commercial real estate and real estate securities funds, whose objective is to outperform an index.
    (13) The contractual net value of the investment of securities lending collateral invested in primarily short-term bond funds is $\$ 163$ million and the liability for securities lending collateral is $\$ 163$ million.

