

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2015

or

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

For the transition period from _____ to _____

Commission file number 001-32293



HARTFORD LIFE INSURANCE COMPANY

(Exact name of registrant as specified in its charter)

Connecticut
(State or other jurisdiction of
incorporation or organization)

06-0974148
(I.R.S. Employer
Identification No.)

One Hartford Plaza, Hartford, Connecticut 06155
(Address of principal executive offices) (Zip Code)

(860) 547-5000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark:

- | | Yes | No |
|--|--|---|
| • if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| • whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. | | |
| Large accelerated filer <input type="checkbox"/> | Accelerated filer <input type="checkbox"/> | Non Accelerated filer <input checked="" type="checkbox"/> |
| | Smaller reporting company <input type="checkbox"/> | |
| • whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The aggregate market value of the shares of Common Stock held by non-affiliates of the registrant as of June 30, 2015 was \$0 , because all of the outstanding shares of Common Stock were owned by Hartford Life Inc., a direct wholly owned subsidiary of Hartford Holdings, Inc.

As of February 26, 2016 , there were outstanding 1,000 shares of Common Stock, \$5,690 par value per share, of the registrant.

The registrant meets the conditions set forth in General Instruction (I) (1) (a) and (b) of Form 10-K and is therefore filing this Form with the reduced disclosure format.

**HARTFORD LIFE INSURANCE COMPANY
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2015**

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* Item prepared in accordance with General Instruction I (2) of Form 10-K.

Forward-Looking Statements

Certain of the statements contained herein are forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “projects,” and similar references to future periods.

Forward-looking statements are based on our current expectations and assumptions regarding economic, competitive, legislative and other developments. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. They have been made based upon management’s expectations and beliefs concerning future developments and their potential effect upon Hartford Life Insurance Company and its subsidiaries (collectively, the “Company”). Future developments may not be in line with management’s expectations or may have unanticipated effects. Actual results could differ materially from expectations, depending on the evolution of various factors, including the risks and uncertainties identified below, as well as factors described in such forward-looking statements or in Part I, Item 1A. Risk Factors, in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and those identified from time to time in our other filings with the Securities and Exchange Commission (“SEC”).

- Risks Relating to Economic, Market and Political Conditions:
 - challenges related to the Company's current operating environment, including global political, economic and market conditions, and the effect of financial market disruptions, economic downturns or other potentially adverse macroeconomic developments on the attractiveness of our products, the returns in our investment portfolios and the hedging costs associated with our runoff annuity block;
 - financial risk related to the continued reinvestment of our investment portfolios and performance of our hedge program for our runoff annuity block;
 - market risks associated with our business, including changes in interest rates, credit spreads, equity prices, market volatility and foreign exchange rates, commodities prices and implied volatility levels;
 - the impact on our investment portfolio if our investment portfolio is concentrated in any particular segment of the economy;
- Risks Relating to Estimates, Assumptions and Valuations:
 - risk associated with the use of analytical models in making decisions in key areas such as underwriting, capital management, hedging, and reserving;
 - the potential for differing interpretations of the methodologies, estimations and assumptions that underlie the valuation of the Company’s financial instruments that could result in changes to investment valuations;
 - the subjective determinations that underlie the Company’s evaluation of other-than-temporary impairments on available-for-sale securities;
 - the potential for further acceleration of deferred policy acquisition cost amortization;
 - the potential for valuation allowances against deferred tax assets;
- Financial Strength, Credit and Counterparty Risks:
 - the impact on our statutory capital of various factors, including many that are outside the Company’s control, which can in turn affect our credit and financial strength ratings, cost of capital, regulatory compliance and other aspects of our business and results;
 - risks to our business, financial position, prospects and results associated with negative rating actions or downgrades in the Company's financial strength and credit ratings or negative rating actions or downgrades relating to our investments;
 - losses due to nonperformance or defaults by others including, sourcing partners, derivative counterparties and other third parties;
 - the potential for losses due to our reinsurers' unwillingness or inability to meet their obligations under reinsurance contracts and the availability, pricing and adequacy of reinsurance to protect the Company against losses;

- Insurance Industry and Product-Related Risks:
 - volatility in our statutory earnings and earnings calculated in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and potential material changes to our results resulting from our adjustment of our risk management program to emphasize protection of economic value;
 - the possibility of a pandemic, or other natural or man-made disaster that may adversely affect our businesses;
 - the possible occurrence of terrorist attacks and the Company’s ability to contain its exposure, including limitations on coverage from the federal government under applicable reinsurance terrorism laws;
- Regulatory and Legal Risks:
 - the cost and other effects of increased regulation as a result of the implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, and the potential effect of other domestic and foreign regulatory developments, including those that could adversely impact the Company’s operating costs and required capital levels;
 - unfavorable judicial or legislative developments;
 - the impact of changes in federal or state tax laws;
 - the impact of potential changes in accounting principles and related financial reporting requirements;
- Other Strategic and Operational Risks:
 - risks associated with the runoff of our annuity book of business;
 - the risks, challenges and uncertainties associated with The Hartford's expense reduction initiatives and other actions, which may include acquisitions, divestitures or restructurings;
 - the Company’s ability to maintain the availability of its systems and safeguard the security of its data in the event of a disaster, cyber or other information security incident or other unanticipated event;
 - the risk that our framework for managing operational risks may not be effective in mitigating material risk and loss to the Company;
 - the potential for difficulties arising from outsourcing and similar third-party relationships; and
 - the Company’s ability to protect its intellectual property and defend against claims of infringement.

Any forward-looking statement made by the Company in this document speaks only as of the date of the filing of this Form 10-K. Factors or events that could cause the Company’s actual results to differ may emerge from time to time, and it is not possible for the Company to predict all of them. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise.

PART I

Item 1. BUSINESS

(Dollar amounts in millions unless otherwise stated)

General

Hartford Life Insurance Company (together with its subsidiaries, "HLIC", "the Company", "we" or "our"), is an indirect wholly-owned subsidiary of The Hartford Financial Services Group, Inc. ("The Hartford"), a holding company for a group of subsidiaries that provide property and casualty insurance, group benefits and mutual funds to individual and business customers in the United States. HLIC is the primary insurance company supporting the business of The Hartford's Talcott Resolution segment. The Company previously sold fixed and variable annuities, individual life insurance, retirement plans, institutional investment products and private placement life insurance. In 2013, the Company sold its retirement plans business and substantially all of its individual life business. In addition, the Company completed the sale of the U.K variable annuity business of Hartford Life International Limited ("HLIL"), an indirect wholly-owned subsidiary in 2013. The Hartford no longer sells any of the products underwritten by the Company.

The Company's mission is to efficiently manage the runoff of the business while honoring the Company's obligations to its contractholders. The Company manages approximately 852 thousand annuity contracts with account value of approximately \$67 billion and private placement life insurance with account value of approximately \$40 billion as of December 31, 2015 .

The Company's results of operations are primarily influenced by the financial results of the variable and fixed annuity, institutional investment and private placement products as well as the capital gain and loss activity associated with the Company's variable annuity hedging program. Total assets and total stockholder's equity were \$175.4 billion and \$8.2 billion , respectively, at December 31, 2015 .

Reserves

The Company and its insurance subsidiaries establish and carry as liabilities reserves for its insurance products to estimate for the following:

- a liability for unpaid losses, including those that have been incurred but not yet reported as well as estimates of all expenses associated with processing and settling these claims;
- a liability equal to the balance that accrues to the benefit of the life and annuity insurance policyholder as of the consolidated financial statement date, otherwise known as the account value;
- a liability for future policy benefits, representing the present value of future benefits to be paid to or on behalf of policyholders less the present value of future estimated net premiums;
- fair value reserves for living benefits embedded derivative guarantees; and
- death and living benefit reserves which are computed based on a percentage of revenues less actual claim costs.

Liabilities for unpaid losses and future policy benefits are calculated based on actuarially recognized methods using morbidity and mortality tables, which are modified to reflect the Company's actual experience when appropriate. Liabilities for unpaid losses include estimates of amounts to fully settle known reported claims as well as claims related to insured events that the Company estimates have been incurred but have not yet been reported. Liabilities for future policy benefits, less the present value of future estimated net premiums and with interest thereon compounded annually at certain assumed rates, are calculated at amounts that are expected to be sufficient to meet the Company's policy obligations at their maturities or in the event of the disability or death of an insured. Other insurance liabilities include those for unearned premiums and benefits in excess of account value. Reserves for assumed reinsurance are computed in a manner that is comparable to direct insurance reserves.

Reinsurance

The Company cedes insurance to affiliated and unaffiliated insurers to enable the Company to manage capital and risk exposure. Such arrangements do not relieve the Company of its primary liability to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company. The Company evaluates the risk transfer of its reinsurance contracts, the financial condition of its reinsurers and concentrations of credit risk. Reinsurance accounting is followed for ceded transactions that provide indemnification against loss or liability relating to insurance risk (i.e. risk transfer). If the ceded transactions do not provide risk transfer, the Company accounts for these transactions as financing transactions. The Company's procedures include careful initial selection of its reinsurers, structuring agreements to provide collateral funds where necessary, and regularly monitoring the financial condition and ratings of its reinsurers.

In 2014, concurrent with the sale of Hartford Life Insurance KK, a Japanese company ("HLIKK"), HLIKK recaptured certain risks that had been reinsured to the Company and Hartford Life and Annuity Insurance Company ("HLAI"), a wholly owned subsidiary of the Company by terminating or modifying intercompany agreements. HLAI continues to provide reinsurance for \$619 of yen denominated fixed payout annuities. The Company has ceded reinsurance to Massachusetts Mutual Life Insurance Company ("MassMutual") and The Prudential Insurance Company of America ("Prudential"), a subsidiary of Prudential Financial, Inc., respectively, in connection with the sales of its Retirement Plans and Individual Life businesses in 2013. For further discussion of these transactions, see Note 4 - Reinsurance, Note 10 - Transactions with Affiliates, and Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

Investment Operations

The majority of the Company's investment portfolios are managed by Hartford Investment Management Company ("HIMCO"). HIMCO manages the portfolios to maximize economic value, while attempting to generate the income necessary to support the Company's various product obligations, within internally established objectives, guidelines and risk tolerances. The portfolio objectives and guidelines are developed based upon the asset/liability profile, including duration, convexity and other characteristics within specified risk tolerances. The risk tolerances considered include, for example, asset sector and credit issuer allocation limits, maximum portfolio limits for below investment grade holdings and foreign currency exposure limits. The Company attempts to minimize adverse impacts to the portfolio and the Company's results of operations from changes in economic conditions through asset diversification, asset allocation limits, asset/liability duration matching and through the use of derivatives. For further discussion of HIMCO's portfolio management approach, see Part II, Item 7, MD&A – Enterprise Risk Management.

Enterprise Risk Management

The Company's risk management function is part of The Hartford's overall risk management program. The Hartford has an enterprise risk management function ("ERM") that is charged with providing analyses of The Hartford's risks on an individual and aggregated basis and with ensuring that The Hartford's risks remain within its risk appetite and tolerances. ERM plays an integral role at The Hartford by fostering a strong risk management culture and discipline. The mission of ERM is to support The Hartford in achieving its strategic priorities by:

- Providing a comprehensive view of the risks facing The Hartford, including risk concentrations and correlations;
- Helping management define The Hartford's overall capacity and appetite for risk by evaluating the risk/return profile of the business relative to The Hartford's strategic intent and financial underpinning;
- Assisting management in setting specific risk tolerances and limits that are measurable, actionable, and comply with The Hartford's overall risk philosophy;
- Communicating and monitoring The Hartford's risk exposures relative to set limits and recommending, or implementing as appropriate, mitigating strategies; and
- Providing insight to assist leaders in growing the businesses and achieving optimal risk-adjusted returns within established guidelines.

Enterprise Risk Management Structure and Governance

At The Hartford, the Board of Directors ("the Board") has ultimate responsibility for risk oversight. It exercises its oversight function through its standing committees, each of which has primary risk oversight responsibility with respect to all matters within the scope of its duties as contemplated by its charter. In addition, the Finance, Investment and Risk Management Committee ("FIRMCo"), which is comprised of all members of the Board, has responsibility for the oversight of the investment, financial, and risk management activities of The Hartford, except as otherwise provided in The Hartford's Governance Guidelines. The oversight of all risk exposures includes, but is not limited to:

- Market risk, including credit, interest rate, equity market, and foreign exchange;
- Liquidity and capital requirements of the Company;
- Insurance risks, including those arising out of catastrophes and acts of terrorism;
- Cybersecurity risk; and
- Any other risk that poses a material threat to the strategic viability of the Company.

The Audit Committee is responsible for, among other things, discussing with management policies with respect to risk assessment and risk management.

At the corporate level, The Hartford's Enterprise Chief Risk Officer ("Chief Risk Officer") leads ERM. The Chief Risk Officer reports directly to The Hartford's Chief Executive Officer ("CEO"). The Hartford has established the Enterprise Risk and Capital Committee ("ERCC") that includes The Hartford's CEO, President, Chief Financial Officer, Chief Investment Officer, Chief Risk Officer, General Counsel and others as deemed necessary by the committee chair. The ERCC oversees the risk profile and risk management practices of The Hartford. The ERCC also oversees capital management and the allocation of capital to the lines of business. The ERCC is responsible for significant company-wide risk exposures including, but not limited to, financial risk, liquidity and capital requirements, insurance risk, operational risks, and any other risk deemed significant. The ERCC reports to the Board primarily through the FIRMCo and through interactions with the Audit Committee.

The Hartford also has committees that manage specific risks and recommend risk mitigation strategies to the ERCC. These committees include, but are not limited to, Asset Liability Committees, Catastrophe Risk Committee, Emerging Risk Committees, Model Oversight Committees and the Operational Risk Committee.

Risk Management Framework

At the Company, risk is managed at multiple levels. The Hartford utilizes three lines of defense in risk management, to integrate its risk management strategy and appetite into all areas of the Company. The first line of defense in risk management is generally the responsibility of the lines of business. Senior business leaders are responsible for managing risks specific to their business objectives and business environment. The second line of defense in risk management is generally owned by ERM. ERM has the responsibility to ensure that the Company has insight into its aggregate risk and that risks are managed within the firm's overall risk appetite. Legal and Compliance also commonly act as a second line of defense in risk management. The third line of defense in risk management is owned by Internal Audit. Internal Audit provides independent assurance that each business unit's controls are present, compliant, and effective, informs the risk identification process and provides audit and consultative support to the Company.

The Hartford's Risk Management Framework consists of five core elements:

1. **Risk Culture and Governance:** The Hartford's has established policies for its major risks and a formal governance structure with leadership oversight and an assignment of accountability and authority. The governance structure starts at the Board and cascades to the ERCC and then to individual risk committees across The Hartford. In addition, The Hartford promotes a strong risk management culture and high expectations around ethical behavior.
2. **Risk Identification and Assessment:** Through its ERM organization, The Hartford has developed processes for the identification, assessment, and, when appropriate, response to internal and external risks to The Hartford's operations and business objectives. Risk identification and prioritization has been established within each risk area, including processes around emerging risks.
3. **Risk Appetite, Tolerances, and Limits:** The Hartford has a formal enterprise risk appetite framework and policy that is approved by the ERCC and reviewed by the Board. The risk appetite framework includes an enterprise risk appetite statement, risk preferences, risk tolerances and enterprise risk limits. Enterprise risk limits which quantify tolerances into specific limits by risk category are defined in underlying enterprise risk policies.
4. **Risk Management and Controls:** While The Hartford utilizes the committee structure to elevate risk discussions and decision-making, there are a variety of working groups that provide decisioning and management of risk within determined tolerances and limits. ERM and the appropriate governing risk committees regularly monitor The Hartford's risk exposure as compared to defined limits and tolerances and provide regular reporting to the ERCC and FIRMCo.
5. **Risk Reporting and Communication:** The Hartford monitors its major risks at the enterprise level through a number of enterprise reports, including but not limited to, a monthly risk dashboard, and regular stress testing. ERM communicates The Hartford's risk exposures to senior and executive management and the Board, and reviews key business performance metrics, risk indicators, audit reports, risk/control self-assessments and risk event data.

For further discussion on risk management, see Part II, Item 7, MD&A – Enterprise Risk Management.

Regulation

Insurance companies are subject to comprehensive and detailed regulation and supervision throughout the United States. The extent of such regulation varies, but generally has its source in statutes which delegate regulatory, supervisory and administrative powers to state insurance departments. Such powers relate to, among other things, the standards of solvency that must be met and maintained; the licensing of insurers and their agents; the nature of and limitations on investments; establishing premium rates; claim handling and trade practices; restrictions on the size of risks which may be insured under a single policy; deposits of securities for the benefit of policyholders; approval of policy forms; periodic examinations of the affairs of companies; annual and other reports required to be filed on the financial condition of companies or for other purposes; fixing maximum interest rates on life insurance policy loans and minimum rates for accumulation of surrender values; and the adequacy of reserves and other necessary provisions for unearned premiums, unpaid losses and loss adjustment expenses and other liabilities, both reported and unreported.

Most states have enacted legislation that regulates insurance holding company systems such as the Company. This legislation provides that each insurance company in the system is required to register with the insurance department of its state of domicile and furnish information concerning the operations of companies within the holding company system that may materially affect the operations, management or financial condition of the insurers within the system. All transactions within a holding company system affecting insurers must be fair and equitable. Notice to the insurance departments is required prior to the consummation of transactions affecting the ownership or control of an insurer and of certain material transactions between an insurer and any entity in its holding company system. In addition, certain of such transactions cannot be consummated without the applicable insurance department's prior approval. In the jurisdictions in which the Company is domiciled, the acquisition of more than 10% of its outstanding common stock would require the acquiring party to make various regulatory filings.

The Company and certain of its subsidiaries sold variable life insurance, variable annuity, and some fixed guaranteed products that are "securities" registered with the SEC under the Securities Act of 1933, as amended. Some of the products have separate accounts that are registered as investment companies under the Investment Company Act of 1940, as amended (the "1940 Act") and/or are regulated by state law. Separate account investment products are also subject to state insurance regulation. Moreover, each separate account is generally divided into sub-accounts, each of which invests in an underlying mutual fund that is also registered as an investment company under the 1940 Act ("Underlying Funds").

In addition, other subsidiaries of the Company sold and distributed the Company's variable insurance products as broker dealers and are subject to regulation promulgated and enforced by the Financial Industry Regulatory Authority ("FINRA"), the SEC and/or in, some instances, state securities administrators. Because federal and state laws and regulations are primarily intended to protect investors in securities markets, they generally grant regulators broad rulemaking and enforcement authority. Some of these regulations include among other things regulations impacting sales methods, trading practices, suitability of investments, use and safekeeping of customers' funds, corporate governance, capital, record keeping, and reporting requirements.

Failure to comply with federal and state laws and regulations may result in censure, fines, the issuance of cease-and-desist orders or suspension, termination or limitation of the activities of our operations and/or our employees. We cannot predict the impact of these actions on our businesses, results of operations or financial condition.

Intellectual Property

The Hartford relies on a combination of contractual rights and copyright, trademark, patent and trade secret laws to establish and protect our intellectual property.

The Hartford has a trademark portfolio that we consider important in the marketing of our products and services, including, among others, the trademarks of The Hartford name, the Stag logo and the combination of these two marks. The duration of trademark registrations may be renewed indefinitely subject to country-specific use and registration requirements. We regard our trademarks as extremely valuable assets in marketing our products and services and vigorously seek to protect them against infringement. In addition, we own a number of patents and patent applications, some of which may be important to our business operations. Patents are of varying duration depending on filing date, and will typically expire at the end of their natural term.

Item 1A. RISK FACTORS

In deciding whether to invest in securities of the Company, you should carefully consider the following risk factors, any of which could have an adverse effect on the business, financial condition, results of operations, or liquidity of the Company. However, the Company may also be subject to other risks and uncertainties that are not specifically described below, which may have an adverse effect on the business, financial condition, results of operations or liquidity of the Company. This information should be considered carefully together with the other information contained in this report and the other reports and materials filed by the Company with the SEC. The following risk factors have been organized by category for ease of use, however many of the risks may have impacts in more than one category. These categories, therefore, should be viewed as a starting point for understanding the significant risks facing us and not as a limitation on the potential impact of the matters discussed. Risk factors are not necessarily listed in order of importance.

Risks Relating to Economic, Market and Political Conditions

Unfavorable conditions in our operating environment, including general economic and global capital market conditions, such as changes in interest rates, credit spreads, equity prices, market volatility, foreign exchange rates, commodities prices and real estate market deterioration, may have a material adverse effect on our business, financial condition, results of operations, and liquidity.

The Company's investment portfolio and insurance liabilities are sensitive to changes in global capital market conditions. Stressed conditions or disruptions in global capital markets can directly impact our business, financial condition, results of operations, and liquidity as well as impact the economic environment. Weak economic conditions, such as high unemployment, low labor force participation, lower family income, higher tax rates, lower business investment and lower consumer spending may have adversely affected or may in the future adversely affect the demand for financial and insurance products, as well as their profitability in some cases. Global economic conditions may result in the persistence of a low interest rate environment as well as volatility in other global capital market conditions, which will continue to pressure our investment results.

One important exposure to equity risk relates to the potential for lower earnings associated with our operations. Fee income on products such as variable annuities is earned based upon the fair value of the assets under management. Should equity markets decline from current levels, assets under management and related fee income will be reduced. Certain of our products have guaranteed benefits that increase our potential obligation and statutory capital exposure when equity markets decline. Sustained declines in equity markets may result in the need to utilize significant additional capital to support these products.

A sustained low interest rate environment would pressure our net investment income and could result in lower margins and lower estimated gross profits on certain products. In addition, due to the long-term nature of some of the Company's liabilities, such as structured settlements and guaranteed benefits on variable annuities, sustained declines in long-term interest rates subjects us to reinvestment risks, increased hedging costs, spread compression and capital volatility. A rise in interest rates, in the absence of other countervailing changes, will reduce the market value of our investment portfolio and, if long-term interest rates were to rise dramatically, certain products might be exposed to disintermediation risk. Disintermediation risk refers to the risk that our policyholders may surrender their contracts in a rising interest rate environment, requiring us to liquidate assets in an unrealized loss position. An increase in interest rates can also impact our tax planning strategies and in particular our ability to utilize tax benefits to offset certain previously recognized realized capital losses.

Our exposure to credit spreads primarily relates to changes in market price of fixed income instruments associated with changes in credit spreads. If issuer credit spreads widen significantly and remain at wide levels over an extended period of time, other-than-temporary impairments and decreases in the market value of our investment portfolio will likely result. In addition, losses may also occur due to volatility in credit spreads. When credit spreads widen, we incur losses associated with credit derivatives where the Company assumes exposure. When credit spreads tighten, we incur losses associated with derivatives where the Company has purchased credit protection. If credit spreads tighten significantly, the Company's net investment income associated with new purchases of fixed maturities may be reduced.

Our statutory surplus is also affected by widening credit spreads as a result of the accounting for the assets and liabilities on our fixed market value adjusted ("MVA") annuities. Statutory separate account assets supporting the fixed MVA annuities are recorded at fair value. In determining the statutory reserve for the fixed MVA annuities we are required to use current crediting rates. In many capital market scenarios, current crediting rates are highly correlated with market rates implicit in the fair value of statutory separate account assets. As a result, the change in the statutory reserve from period to period will likely substantially offset the change in the fair value of the statutory separate account assets. However, in periods of volatile credit markets, actual credit spreads on investment assets may increase sharply for certain sub-sectors of the overall credit market, resulting in statutory separate account asset market value losses. As actual credit spreads are not fully reflected in current crediting rates, the calculation of statutory reserves may not substantially offset the change in fair value of the statutory separate account assets resulting in reductions in statutory surplus. This may result in the need to devote significant additional capital to support the fixed MVA product.

In addition, a reduction in market liquidity can make it difficult to value certain of our securities when trading becomes less frequent. As such, valuations may include assumptions or estimates that may be more susceptible to significant period-to-period changes, which could have a material adverse effect on our business, financial condition, results of operations or liquidity.

Our exposure to commodity prices primarily relates to our investment portfolio. Our investment portfolio includes fixed maturities and equity securities issued by companies and sovereigns that derive a portion of their revenues from commodities, including oil, coal, natural gas, and precious and non-precious metals. In periods in which the prices of these and other commodities fall, absent other countervailing changes, decreases in the market value of our investment portfolio will likely result. If these declines in commodities prices are severe and persist over an extended period of time, other-than-temporary impairments may result.

Significant declines in equity prices, changes in interest rates, changes in credit spreads, inflation, or real estate market deterioration, individually or in combination, could have a material adverse effect on our business, financial condition, results of operations or liquidity. Our hedging assets seek to reduce the net economic sensitivity of our potential obligations from guaranteed benefits to equity market, and interest rate fluctuations. Because of the accounting asymmetries between our hedging targets and statutory and U.S. GAAP accounting principles for our guaranteed benefits, rising equity markets and/or rising interest rates may result in statutory or U.S. GAAP losses.

Concentration of our investment portfolio in any particular segment of the economy may have adverse effects on our business, financial condition, results of operations and liquidity.

The concentration of our investment portfolios in any particular industry, collateral type, group of related industries or geographic sector could have an adverse effect on our investment portfolios and consequently on our business, financial condition, results of operations and liquidity. Events or developments that have a negative impact on any particular industry, group of related industries or geographic region may have a greater adverse effect on our investment portfolio to the extent that the portfolio is concentrated rather than diversified.

Risks Relating to Estimates, Assumptions and Valuations

Actual results could materially differ from the analytical models we use to assist our decision making in key areas such as capital management, hedging and reserving, which could have a material adverse effect on our business, financial condition, results of operations or liquidity.

We employ various modeling techniques (e.g., scenarios, predictive, stochastic and/or forecasting) to analyze and estimate exposures, loss trends and other risks associated with our insurance businesses, investments and capital management. We use the modeled outputs and related analyses to assist us in decision-making related to capital allocation, reserving, investments, hedging and reinsurance. Both proprietary and third party models we use incorporate numerous assumptions and forecasts about the future level and variability of interest rates, capital requirements, loss frequency and severity, currency exchange rates, policyholder behavior, equity markets and inflation, among others. The modeled outputs and related analyses are subject to the inherent limitations of any statistical analysis, including the use of historical internal and industry data and assumptions, which may be stale, incomplete or erroneous. Consequently, actual results may differ materially from our modeled results. The profitability and financial condition of the Company substantially depends on the extent to which our actual experience is consistent with assumptions we use in our models and ultimate model outputs. If, based upon these models or other factors, our estimates of capital adequacy or the risks we are exposed to prove to be materially inaccurate, our business, financial condition, results of operations or liquidity may be adversely affected.

Our valuations of many of our financial instruments include methodologies, estimations and assumptions that are subject to differing interpretations and could result in changes to investment valuations that may materially adversely affect our business, results of operations, financial condition and liquidity.

The following financial instruments are carried at fair value in the Company's consolidated financial statements: fixed maturities, equity securities, freestanding and embedded derivatives, certain hedge fund investments, and separate account assets. The determination of fair values is made at a specific point in time, based on available market information and judgments about financial instruments, including estimates of the timing and amounts of expected future cash flows and the credit standing of the issuer or counterparty. The use of different methodologies and assumptions may have a material effect on the estimated fair value amounts.

During periods of market disruption, including periods of significantly increasing/decreasing interest rates, rapidly widening/narrowing credit spreads or illiquidity, it may be difficult to value certain of our securities if trading becomes less frequent and/or market data becomes less observable. There may be certain asset classes that were in active markets with significant observable data that become illiquid due to the financial environment. In such cases, securities may require more subjectivity and management judgment in determining their fair values and those fair values may differ materially from the value at which the investments may be ultimately sold. Further, rapidly changing or unprecedented credit and equity market conditions could materially impact the valuation of securities and the period-to-period changes in value could vary significantly. Decreases in value could have a material adverse effect on our business, results of operations, financial condition and liquidity.

Evaluation of available-for-sale securities for other-than-temporary impairment involves subjective determinations and could materially impact our business, financial condition, results of operations and liquidity.

The evaluation of impairments is a quantitative and qualitative process, which is subject to risks and uncertainties and is intended to determine whether a credit and/or non-credit impairment exists and whether an impairment should be recognized in current period earnings or in other comprehensive income. The risks and uncertainties include changes in general economic conditions, the issuer's financial condition or future recovery prospects, the effects of changes in interest rates or credit spreads and the expected recovery period. For securitized financial assets with contractual cash flows, the Company uses its best estimate of cash flows over the life of the security to determine if a security is other-than-temporarily-impaired. In addition, estimating future cash flows involves incorporating information received from third-party sources and making internal assumptions and judgments regarding the future performance of the underlying collateral and assessing the probability that an adverse change in future cash flows has occurred. The determination of the amount of other-than-temporary impairments is based upon our quarterly evaluation and assessment of known and inherent risks associated with the respective asset class. Such evaluations and assessments are revised as conditions change and new information becomes available.

Additionally, our management considers a wide range of factors about the security issuer and uses their best judgment in evaluating the cause of the decline in the estimated fair value of the security and in assessing the prospects for recovery. Inherent in management's evaluation of the security are assumptions and estimates about the operations of the issuer and its future earnings potential.

Impairment losses in earnings could materially adversely affect our results of operations and financial condition.

If assumptions used in estimating future gross profits differ from actual experience, we may be required to accelerate the amortization of DAC and increase reserves for guaranteed minimum death and withdrawal benefits, which could have a material adverse effect on our results of operations and financial condition.

The Company deferred acquisition costs associated with the prior sales of its annuity products. Deferred acquisition costs for the annuity products are amortized over the expected life of the contracts. The remaining deferred but not yet amortized cost is referred to as the Deferred Acquisition Cost ("DAC") asset. We amortize these costs in proportion to the present value of estimated gross profits ("EGPs"). The Company evaluates the EGPs compared to the DAC asset to determine if an impairment exists. The Company also establishes reserves for guaranteed minimum death benefits ("GMDB") and the life contingent portion of guaranteed minimum withdrawal benefits ("GMWB") using components of EGPs. The projection of EGPs, or components of EGPs, requires the use of certain assumptions, principally related to separate account fund returns, surrender and lapse rates, interest margin (including impairments), mortality, benefit utilization, annuitization and hedging costs. Of these factors, we anticipate that changes in separate account fund returns are most likely to impact the EGP, along with the rate of amortization of such costs. However, other factors such as those the Company might employ to reduce risk, such as the cost of hedging or other risk mitigating techniques, as well as the effect of increased surrenders, could also significantly reduce estimates of future gross profits. Estimating future gross profits is a complex process requiring considerable judgment and the forecasting of events well into the future. If our assumptions regarding policyholder behavior, including lapse rates, benefit utilization, surrenders, annuitization, hedging costs or costs to employ other risk mitigating techniques prove to be inaccurate or if significant or sustained equity market declines occur, we could be required to accelerate the amortization of DAC related to annuity contracts, and increase reserves for GMDB and life-contingent GMWB which would result in a charge to net income. Such adjustments could have a material adverse effect on our results of operations and financial condition.

If our businesses do not perform well, we may be required to establish a valuation allowance against the deferred income tax asset, which could have a material adverse effect on our results of operations and financial condition.

Our income tax expense includes deferred income taxes arising from temporary differences between the financial reporting and tax bases of assets and liabilities and carryforwards for foreign tax credits, capital losses, net operating losses and alternative minimum tax credits. Deferred tax assets are assessed periodically by management to determine if it is more likely than not that the deferred income tax asset will be realized. Factors in management's determination include the performance of the business including the ability to generate, from a variety of sources and tax planning strategies, sufficient future taxable income and capital gains before net operating loss and capital loss carryforwards expire. If based on available information, it is more likely than not that we are unable to recognize a full tax benefit on deferred tax assets, then a valuation allowance will be established with a corresponding charge to net income (loss). Charges to increase our valuation allowance could have a material adverse effect on our results of operations and financial condition.

Financial Strength, Credit and Counterparty Risks

The amount of statutory capital that we have, and the amount of statutory capital that we must hold to maintain our financial strength and credit ratings and meet other requirements, can vary significantly from time to time and is sensitive to a number of factors outside of our control, including equity market, credit market and interest rate conditions, changes in policyholder behavior, changes in rating agency models, and changes in regulations.

We conduct the vast majority of our business as a licensed insurance company and through our licensed insurance company subsidiaries. Accounting standards and statutory capital and reserve requirements for licensed insurance companies are prescribed by the applicable insurance regulators and the National Association of Insurance Commissioners (“NAIC”). Insurance regulators have established regulations that provide minimum capitalization requirements based on risk-based capital (“RBC”) formulas for life companies. The RBC formula for life companies establishes capital requirements relating to insurance, business, asset and interest rate risks, including equity, interest rate and expense recovery risks associated with variable annuities and group annuities that contain death benefits or certain living benefits.

In any particular year, statutory surplus amounts and RBC ratios may increase or decrease depending on a variety of factors, including the amount of statutory income or losses generated by us and our insurance subsidiaries, the amount of additional capital we and our insurance subsidiaries must hold to support business growth, the amount of dividends or made to our parent company or taken out of our insurance subsidiaries, changes in equity market levels, the value of certain fixed-income and equity securities in our investment portfolio, the value of certain derivative instruments, changes in interest rates, the impact of internal reinsurance arrangements, admissibility of deferred tax assets and changes to the NAIC RBC formulas. Most of these factors are outside of the Company's control. The Company's financial strength and credit ratings are significantly influenced by our statutory surplus amounts and RBC ratios of our insurance company subsidiaries. In addition, rating agencies may implement changes to their internal models that have the effect of increasing the amount of statutory capital we must hold in order to maintain our current ratings. Also, in extreme scenarios of equity market declines and other capital market volatility, the amount of additional statutory reserves that we are required to hold for our variable annuity guarantees increases at a greater than linear rate. This reduces the statutory surplus used in calculating our RBC ratios. When equity markets increase, surplus levels and RBC ratios would generally be expected to increase. However, as a result of a number of factors and market conditions, including the level of hedging costs and other risk transfer activities, statutory reserve requirements for death and living benefit guarantees and increases in RBC requirements, surplus and RBC ratios may not increase when equity markets increase. Due to these factors, projecting statutory capital and the related RBC ratios is complex. If our statutory capital resources are insufficient to maintain a particular rating and if The Hartford were not to raise additional capital, either at its discretion or because it was unable to do so, our financial strength and credit ratings might be downgraded by one or more rating agencies. Downgrades below certain thresholds could trigger counterparty rights to terminate reinsurance treaties. Downgrades could also begin to trigger potentially material collateral calls on certain of our derivative instruments and counterparty rights to terminate derivative relationships, both of which could limit our ability to purchase additional derivative instruments.

Losses due to nonperformance or defaults by others, including issuers of investment securities mortgage loans or reinsurance and derivative instrument counterparties, could have a material adverse effect on the value of our investments, business, financial condition, results of operations and liquidity.

Issuers or borrowers whose securities or loans we hold, customers, trading counterparties, counterparties under swaps and other derivative contracts, reinsurers, clearing agents, exchanges, clearing houses and other financial intermediaries and guarantors may default on their obligations to us due to bankruptcy, insolvency, lack of liquidity, adverse economic conditions, operational failure, fraud, government intervention or other reasons. Such defaults could have a material adverse effect on the value of our investments, business, financial condition, results of operations and liquidity. Additionally, the underlying assets supporting our structured securities or loans may deteriorate causing these securities or loans to incur losses.

Our investment portfolio includes securities backed by real estate assets, the value of which may be adversely impacted if conditions in the real estate market significantly deteriorate, including declines in property values and increases in vacancy rates, delinquencies and foreclosures, ultimately resulting in a reduction in expected future cash flows for certain securities.

The Company also has exposure to foreign-based issuers of securities and providers of reinsurance. These foreign issuers include European and certain emerging market issuers. Despite stabilization in the European market, there are still fundamental structural issues that remain and may result in the re-emergence of fiscal and economic issues. In addition, there has been recent volatility within certain emerging market countries spurred by concerns over the potential for rising interest rates, slowing global growth, lower prices for oil and other commodities, and the devaluation of certain currencies. Further details of the European and certain emerging market private and sovereign issuers held within the investment portfolio and the Company's European based reinsurance arrangements can be found in Part II, Item 7, MD&A - Enterprise Risk Management - Investment Portfolio Risks and Risk Management.

Property value declines and loss rates that exceed our current estimates, as outlined in Part II, Item 7, MD&A - Enterprise Risk Management - Other-Than-Temporary Impairments, or a worsening of global economic conditions could have a material adverse effect on our business, financial condition, results of operations and liquidity.

To the extent the investment portfolio is not adequately diversified, concentrations of credit risk may exist which could negatively impact the Company if significant adverse events or developments occur in any particular industry, group of related industries or geographic regions. The Company's investment portfolio is not exposed to any credit concentration risk of a single issuer greater than 10% of the Company's stockholder's equity other than U.S. government and U.S. government agencies backed by the full faith and credit of the U.S. government. However, if issuers of securities or loans we hold are acquired, merge or otherwise consolidate with other issuers of securities or loans held by the Company, our investment portfolio's credit concentration risk to issuers could increase above the 10% threshold, for a period of time, until the Company is able to sell securities to get back in compliance with the established investment credit policies. For discussion of the Company's exposure to credit concentration risk of reinsurers, see the risk factor below.

We may incur losses due to our reinsurers' unwillingness or inability to meet their obligations under reinsurance contracts and the availability, pricing and adequacy of reinsurance may not be sufficient to protect us against losses.

As an insurer, we frequently use reinsurance to reduce the effect of losses that may arise from, among other things, GMDBs under variable annuity contracts, and other risks that can cause unfavorable results of operations, and to effect the sale of a book of business to an independent company. Under these reinsurance arrangements, other insurers assume a portion of our losses and related expenses; however, we remain liable as the direct insurer on all risks reinsured. Consequently, ceded reinsurance arrangements do not eliminate our obligation to pay claims, and we are subject to our reinsurers' credit risk with respect to our ability to recover amounts due from them. Although we regularly evaluate the financial condition of our reinsurers to minimize our exposure to significant losses from reinsurer insolvencies, our reinsurers may become financially unsound or dispute their contractual obligations. The inability or unwillingness of any reinsurer to meet its financial obligations to us, including the impact of any insolvency or rehabilitation proceedings involving a reinsurer that could affect the Company's access to collateral held in trust, could have a material adverse effect on our financial condition, results of operations and liquidity. This risk may be magnified by a concentration of reinsurance-related credit risk resulting from the sale of the Company's Individual Life business. Further details of such concentration can be found in Part II, Item 7, MD&A - Enterprise Risk Management - Reinsurance Risk.

In addition, market conditions beyond our control determine the availability and cost of the reinsurance we are able to purchase. Reinsurance pricing changes significantly over time, and no assurances can be made that reinsurance will remain continuously available to us to the same extent and on the same terms as are currently available. If we were unable to maintain our current level of reinsurance or purchase new reinsurance protection in amounts that we consider sufficient and at prices that we consider acceptable, we would have to either accept an increase in our net liability exposure or develop to the extent possible other alternatives to reinsurance, such as use of the capital markets. Further, due to the inherent uncertainties as to collection and the length of time before reinsurance recoverables will be due, it is possible that future adjustments to the Company's reinsurance recoverables, net of the allowance, could be required, which could have a material adverse effect on the Company's consolidated results of operations or cash flows in a particular quarterly or annual period.

Insurance Industry and Product-Related Risks

Adjustments to our risk management program relating to products we offered with guaranteed benefits to emphasize protection of economic value may result in statutory and U.S. GAAP volatility in our earnings and potentially material charges to net income (loss).

Some of the in-force business operations, especially variable annuities, offer guaranteed benefits, including GMWB and GMDB, which, in the event of a decline in equity markets, would not only result in lower earnings, but would also increase our exposure to liability for benefit claims. We use reinsurance and benefit designs, such as caps, to mitigate the exposure associated with GMDB. We also use reinsurance in combination with product management actions, such as rider fee increases, investment restrictions and buyout offers, as well as derivative instruments to attempt to minimize the claim exposure and to reduce the volatility of net income associated with the GMWB liability. We remain liable for the guaranteed benefits in the event that reinsurers or derivative counterparties are unable or unwilling to pay, which could result in a need for additional capital to support in-force business.

From time to time, we may adjust our risk management program based on contracts in force, market conditions, or other factors. While we believe that these actions improve the efficiency of our risk management related to these benefits, any such adjustments may result in greater statutory and U.S. GAAP earnings volatility and, based upon the types of hedging instruments used, can result in potentially material charges to net income (loss) in periods of rising equity market pricing levels, higher interest rates, and declines in volatility. We are also subject to the risk that these management actions prove ineffective or that unanticipated policyholder behavior, combined with adverse market events, produces economic losses beyond the scope of the risk management techniques employed, which individually or collectively may have a material adverse effect on our business, financial condition, results of operations and liquidity.

We are particularly vulnerable to losses from catastrophes, both natural and man-made, which could materially and adversely affect our business, financial condition, results of operations and liquidity.

Our operations are exposed to risk of loss from catastrophes associated with pandemics and other events that could significantly increase our mortality and morbidity exposures. Our liquidity could be constrained by a catastrophe, or multiple catastrophes, which could result in extraordinary losses. In addition, in part because accounting rules do not permit insurers to reserve for such catastrophic events until they occur, claims from catastrophic events could have a material adverse effect on our business, financial condition, results of operations or liquidity. To the extent that the frequency or severity of catastrophe losses changes over time or models improve, we will seek to reflect any of these changes in the design and pricing of our products. However, the Company may be exposed to regulatory or legislative actions that prevent a full recognition of loss expectations in the design or pricing of our products or result in additional risk-shifting to the insurance industry.

The occurrence of one or more terrorist attacks in the geographic areas we serve or the threat of terrorism in general may have a material adverse effect on our business, financial condition, results of operations and liquidity.

The occurrence of one or more terrorist attacks in the geographic areas we serve could result in substantially higher claims under our insurance policies than we have anticipated. Further, the continued threat of terrorism and the occurrence of terrorist attacks, as well as heightened security measures and military action in response to these threats and attacks or other geopolitical or military crises, may cause significant volatility in global financial markets, disruptions to commerce and reduced economic activity. These consequences could have an adverse effect on the value of the assets in our investment portfolio as well as those in our separate accounts. Terrorist attacks also could disrupt our operations centers. As a result, it is possible that any, or a combination of all, of these factors may have a material adverse effect on our business, financial condition, results of operations and liquidity.

Regulatory and Legal Risks

The impact of regulatory initiatives and legislative developments, including the implementation of the Dodd-Frank Act of 2010, could have a material adverse impact on our business, financial condition, results of operations and liquidity.

Regulatory initiatives and legislative developments may significantly affect our operations and prospects in ways that we cannot predict. U.S. and overseas governmental and regulatory authorities, including the SEC, the Board of Governors of the Federal Reserve System (the "Federal Reserve"), the Federal Deposit Insurance Corporation ("FDIC"), and FINRA are considering enhanced or new regulatory requirements intended to prevent future financial crises or otherwise stabilize the institutions under their supervision. Such measures are likely to lead to stricter regulation of financial institutions generally, and heightened prudential requirements for systemically important companies in particular. Such measures could include taxation of financial transactions and restrictions on employee compensation.

The Dodd-Frank Act was enacted on July 21, 2010, mandating changes to the regulation of the financial services industry. Implementation of the Dodd-Frank Act is ongoing and may affect our operations and governance in ways that could adversely affect our financial condition and results of operations. The Dodd-Frank Act requires central clearing of, and imposes new margin requirements on, certain derivatives transactions, which increases the costs of our hedging program. Other provisions in the Dodd-Frank Act that may impact us include: the "Federal Insurance Office" within Treasury; the possible adverse impact on the pricing and liquidity of the securities in which we invest resulting from the proprietary trading and market making limitation of the Volcker Rule; the possible adverse impact on the market for insurance-linked securities resulting from the limitations of banking entity involvement in and ownership of certain asset-backed securities transactions; and enhancements to corporate governance, especially regarding risk management.

The Dodd-Frank Act vests the Financial Stability Oversight Council ("FSOC") with the power to designate "systemically important" institutions, which are be subject to special regulatory supervision and other provisions intended to prevent, or mitigate the impact of, future disruptions in the U.S. financial system. Based on its most current financial data, The Hartford is below the quantitative thresholds used by the FSOC to determine which nonbank companies merit consideration. However, the FSOC has indicated it will review on a quarterly basis whether nonbank financial institutions meet the metrics for further review. If The Hartford were to be designated as a systemically important institution, it could be subject to heightened regulation under the Federal Reserve, which could impact requirements regarding capital, liquidity and leverage as well as our business and investment conduct. In addition, The Hartford could be subject to assessments to pay for the orderly liquidation of other systemically important financial institutions that have become insolvent. As a result of these requirements, we could incur substantial costs and suffer other negative consequences, all of which may have a material adverse effect on our business, financial condition, results of operations and liquidity.

We may experience unfavorable judicial or legislative developments involving claim litigation that could have a material adverse effect on our business, financial condition, results of operations and liquidity.

The Company is involved in claims litigation arising in the ordinary course of business. The Company is also involved in legal actions that do not arise in the ordinary course of business, some of which assert claims for substantial amounts. Pervasive or significant changes in the judicial environment relating to matters such as trends in the size of jury awards, developments in the law relating to the liability of insurers or tort defendants, and rulings concerning the availability or amount of certain types of damages could cause our ultimate liabilities to change from our current expectations. Changes in federal or state tort litigation laws or other applicable law could have a similar effect. It is not possible to predict changes in the judicial and legislative environment and their impact on the outcome of litigation filed against the Company. Our business, financial condition, results of operations and liquidity could also be adversely affected if judicial or legislative developments cause our ultimate liabilities to increase from current expectations.

Potential changes in regulation may increase our business costs and required capital levels, which could have a material adverse effect on our business, financial condition, results of operations and liquidity.

We are subject to extensive laws and regulations that are complex, subject to change and often conflicting in their approach or intended outcomes. Compliance with these laws and regulations is costly and can affect our strategy, as well as the demand for and profitability of the products we offer.

State insurance laws regulate most aspects of our insurance businesses, and our insurance subsidiaries are regulated by the insurance departments of the states in which they are domiciled, licensed or authorized to conduct business. These regulatory regimes are generally designed to protect the interests of policyholders rather than insurers, their shareholders and other investors. State laws grant insurance regulatory authorities broad administrative powers with respect to, among other things, licensing and authorization for lines of business, statutory capital and reserve requirements, limitations on the types and amounts of certain investments, underwriting limitations, transactions with affiliates, dividend limitations, changes in control, premium rates and a variety of other financial and non-financial components of an insurer's business.

In addition, future regulatory initiatives could be adopted at the federal or state level that could impact the profitability of our businesses. For example, the NAIC and state insurance regulators are continually reexamining existing laws and regulations, specifically focusing on modifications to statutory accounting principles, interpretations of existing laws and the development of new laws and regulations. The NAIC continues to enhance the U.S. system of insurance solvency regulation, with a particular focus on group supervision, risk-based capital, accounting and financial reporting, enterprise risk management and reinsurance. Any proposed or future legislation or NAIC initiatives, if adopted, may be more restrictive on our ability to conduct business than current regulatory requirements or may result in higher costs or increased statutory capital and reserve requirements. In addition, the Federal Reserve Board and the International Association of Insurance Supervisors ("IAIS") each have initiatives underway to develop insurance group capital standards. While the Company would not currently be subject to either of these capital standard regimes, it is possible that in the future standards similar to what is being contemplated by the Federal Reserve Board or the IAIS could apply to the Company. The NAIC is in the process of developing a U.S. group capital calculation that will employ a methodology based on aggregated risk-based capital.

Further, because these laws and regulations are complex and sometimes inexact, there is also a risk that our business may not fully comply with a particular regulator's or enforcement authority's interpretation of a legal, accounting, or reserving issue or that such regulator's or enforcement authority's interpretation may change over time to our detriment, or expose us to different or additional regulatory risks. The application of these regulations and guidelines by insurers involves interpretations and judgments that may not be consistent with the opinion of state insurance departments. We cannot provide assurance that such differences of opinion will not result in regulatory, tax or other challenges to the actions we have taken to date. The result of those potential challenges could require us to increase levels of statutory capital and reserves or incur higher operating and/or tax costs.

In addition, our international operations are subject to regulation in the relevant jurisdictions in which they operate which in many ways is similar to the state regulation outlined above, with similar related restrictions and obligations. Our asset management businesses are also subject to extensive regulation in the various jurisdictions where they operate. These laws and regulations are primarily intended to protect investors in the securities markets or investment advisory clients and generally grant supervisory authorities broad administrative powers. Compliance with these laws and regulations is costly, time consuming and personnel intensive, and may have an adverse effect on our business, financial condition, results of operations and liquidity. See the risk factor, "The impact of regulatory initiatives and legislative developments, including the implementation of The Dodd-Frank Act of 2010, could have a material adverse impact on our business, financial condition, results of operations and liquidity."

Changes in federal or state tax laws could adversely affect our business, financial condition, results of operations and liquidity.

Changes in federal or state tax laws could have a material adverse effect on our profitability and financial condition, and could result in our incurring materially higher corporate taxes. The Company's tax return reflects certain items, including but not limited to, tax-exempt bond interest, dividends received deductions, tax credits (such as foreign tax credits), and insurance reserve deductions. There is an increasing risk that, in the context of deficit reduction or overall tax reform, federal and/or state tax legislation could modify or eliminate these items, impacting the Company, its investments, investment strategies, and/or its policyholders. Although the specific form of any such legislation is uncertain, changes to the taxation of municipal bond interest could materially and adversely impact the value of those bonds, limit our investment choices and depress portfolio yield. Elimination of the dividends received deduction could increase the Company's actual tax rate, thereby reducing earnings. Conversely, if income tax rates decline it could adversely affect the Company's ability to realize the benefits of its deferred tax assets.

Moreover, many of the products that the Company previously sold benefit from one or more forms of tax-favored status under current federal and state income tax regimes. For example, the Company previously sold annuity contracts that allowed policyholders to defer the recognition of taxable income earned within the contract. Because the Company no longer sells these products, changes in the future taxation of life insurance and/or annuity contracts will not adversely impact future sales. If, however, the treatment of earnings accrued inside an annuity contract was changed prospectively, and the tax-favored status of existing contracts was grandfathered, holders of existing contracts would be less likely to surrender, which would make running off our existing annuity business more difficult.

Changes in accounting principles and financial reporting requirements could result in material changes to our reported results of operations and financial condition.

U.S. GAAP and related financial reporting requirements are complex, continually evolving and may be subject to varied interpretation by the relevant authoritative bodies. Such varied interpretations could result from differing views related to specific facts and circumstances. Changes in U.S. GAAP and financial reporting requirements, or in the interpretation of U.S. GAAP or those requirements, could result in material changes to our reported results and financial condition.

Other Strategic and Operational Risks

As The Hartford's Talcott Resolution segment continues to runoff, the Company is exposed to a number of risks related to the runoff business that could adversely affect our financial condition and results of operations.

Despite being in runoff, Talcott Resolution represents a meaningful share of The Hartford's earnings. Talcott Resolution's revenues and earnings will decline over time as variable and fixed annuity policies lapse. While the Company has been reducing expenses associated with the Talcott Resolution business as the revenues from that business decline, going forward it may become more difficult to reduce expenses, particularly corporate and other enterprise shared services costs, and this could adversely affect the Company's results of operations going forward. In addition, dividends and distributions from the Company and its life insurance subsidiaries have helped fund a significant portion of The Hartford's share repurchases and pay downs of debt under its announced capital management program. As the Talcott Resolution earnings decline, there will be less retained earnings in the Company's insurance subsidiaries available to fund capital management actions.

Further, while The Hartford continues to actively consider alternatives for reducing the size and risk of the annuity book of business, opportunities to do so may be limited and any initiatives pursued may not achieve the anticipated benefits and may negatively impact the Company's statutory capital, net income, core earnings or shareholders' equity. The Company could pursue transactions or other strategic options to reduce the size and risk of Talcott Resolution's annuity book of business, which could result in a significant loss to the Company.

The Hartford's ability to execute on expense reduction initiatives and other actions, which may include divestitures or restructurings, is subject to material challenges, uncertainties and risks which could adversely affect our business, financial condition, results of operations and liquidity.

The Hartford's initiatives to reduce expenses so that its ongoing businesses remain or that such businesses, along with the Company's runoff businesses, become cost efficient may not be successful and The Hartford may not be able to reduce corporate and shared services expenses in the manner and on the schedule it currently anticipates. The Hartford may take further actions beyond the capital management plan, which may include divestitures or restructurings, that may involve additional uncertainties and risks that negatively impact its or the Company's business, financial condition, results of operations and liquidity.

If we are unable to maintain the availability of our systems and safeguard the security of our data due to the occurrence of disasters or a cyber or other information security incident, our ability to conduct business may be compromised, we may incur substantial costs and suffer other negative consequences, all of which may have a material adverse effect on our business, reputation, financial condition, results of operations and liquidity.

We use technology to process, store, retrieve, evaluate and utilize customer and company data and information. Our computer, information technology and telecommunications systems, in turn, interface with and rely upon third-party systems or maintenance. Our business is highly dependent on our ability, and the ability of certain third parties, to access our systems to perform necessary business functions, including, without limitation, providing insurance quotes, processing premiums and deposits, making changes to existing policies or contracts, filing and paying claims, administering variable annuity products, providing customer support, managing our investment portfolios and hedging programs, and conducting our financial reporting and analysis.

Systems failures or outages could compromise our ability to perform our business functions in a timely manner, which could harm our ability to conduct business and hurt our relationships with our business partners and customers. In the event of a disaster such as a natural catastrophe, a pandemic, an industrial accident, a cyber attack, a blackout, a terrorist attack (including conventional, nuclear, biological chemical or radiological) or war, systems upon which we rely may be inaccessible to our employees, customers or business partners for an extended period of time. Even if our employees and business partners are able to report to work, they may be unable to perform their duties for an extended period of time if our data or systems used to conduct our business are disabled or destroyed.

Our systems have been, and will likely continue to be, subject to viruses or other malicious codes, unauthorized access, cyber-attacks or other computer related penetrations. The frequency and sophistication of such threats continue to increase as well. While, to date, The Hartford is not aware of having experienced a material breach of our cyber security systems, administrative and technical controls as well as other preventive actions we take to reduce the risk of cyber incidents and protect our information technology may be insufficient to prevent physical and electronic break-ins, denial of service, cyber-attacks or other security breaches to our systems or those of third parties with whom we do business. Such an event could compromise our confidential information as well as that of our clients and third parties with whom we interact, impede or interrupt our business operations and may result in other negative consequences, including remediation costs, loss of revenue, additional regulatory scrutiny and litigation and reputational damage. In addition, we routinely transmit, to third parties personal, confidential and proprietary information, which may be related to employees and customers, by email and other electronic means, along with receiving and storing such information on our systems. Although we attempt to keep such information confidential, we may be unable to utilize such capabilities in all events, especially with clients, vendors, service providers, counterparties and other third parties who may not have or use appropriate controls to protect confidential information.

Furthermore, certain of our businesses are subject to compliance with regulations enacted by U.S. federal and state governments, or other jurisdictions or enacted by various regulatory organizations or exchanges relating to the privacy of the information of clients, employees or others and, in some cases, specifying required control processes. A misuse or mishandling of confidential or proprietary information being sent to or received from an employee or third party could result in legal liability, regulatory action and reputational harm.

Third parties to whom we outsource certain of our functions, including but not limited to third party administrators, are also subject to cyber-breaches of confidential information, along with the other risks outlined above, any one of which may result in our incurring substantial costs and other negative consequences, including a material adverse effect on our business, reputation, financial condition, results of operations and liquidity. While we maintain cyber liability insurance that provides both third party liability and first party insurance coverages, our insurance may not be sufficient to protect against all loss.

Our framework for managing operational risks may not be effective in mitigating risk and loss to us that could adversely affect our businesses.

Our business performance is highly dependent on our ability to manage operational risks that arise from a large number of day-to-day business activities, including claims processing, servicing, investment, financial and tax reporting, compliance with regulatory requirements and other activities, many of which are very complex and for some of which we rely on third parties. In addition, information technology investments we have made or plan to make in order to improve our operations are subject to material challenges, uncertainties and risks which may adversely impact our ability to achieve intended expense reduction and operational efficiencies. In particular, a number of the information technology platforms we use to administer and service our business are aging. While we have replaced a number of these systems in recent years, some older information technology platforms remain in place and efforts to replace and modernize them may take longer than expected or may not achieve the intended benefits.

We seek to monitor and control our exposure to risks arising out of these activities through a risk control framework encompassing a variety of reporting systems, internal controls, management review processes and other mechanisms. We cannot be completely confident that these processes and procedures will effectively control all known risks or effectively identify unforeseen risks, or that our employees and third-party agents will effectively implement them. Management of operational risks can fail for a number of reasons, including design failure, systems failure, failures to perform, cyber security attacks, human error, or unlawful activities on the part of employees or third parties. In the event that our controls are not effective or not properly implemented, we could suffer financial or other loss, disruption of our businesses, regulatory sanctions or damage to our reputation. Losses resulting from these failures can vary significantly in size, scope and scale and may have material adverse effects on our financial condition or results of operations.

If we experience difficulties arising from outsourcing and similar third-party relationships, our ability to conduct business may be compromised, which may have an adverse effect on our business and results of operations.

We outsource certain business and administrative functions and rely on third-party vendors to provide certain services on our behalf. We have also taken action to reduce coordination costs and take advantage of economies of scale by transitioning multiple functions and services to a small number of third-party providers. We periodically negotiate provisions and renewals of these relationships, and there can be no assurance that such terms will remain acceptable to us or such third parties. If our continuing relationship with certain third-party providers, particularly those on which we rely for multiple functions or services, is interrupted, or if such third-party providers experience disruptions or do not perform as anticipated, or we experience problems with a transition, we may experience operational difficulties, an inability to meet obligations (including, but not limited to, policyholder obligations), increased costs and a loss of business that may have a material adverse effect on our business and results of operations. For other risks associated with our outsourcing of certain functions, see the risk factor, "If we are unable to maintain the availability of our systems and safeguard the security of our data due to the occurrence of disasters or a cyber or other information security incident, our ability to conduct business may be compromised, we may incur substantial costs and suffer other negative consequences, all of which may have a material adverse effect on our business, financial condition, results of operations and liquidity."

We may not be able to protect our intellectual property and may be subject to infringement claims.

We rely on a combination of contractual rights and copyright, trademark, patent and trade secret laws to establish and protect our intellectual property. Although we use a broad range of measures to protect our intellectual property rights, third parties may infringe or misappropriate our intellectual property. We may have to litigate to enforce and protect our copyrights, trademarks, patents, trade secrets and know-how or to determine their scope, validity or enforceability, which represents a diversion of resources that may be significant in amount and may not prove successful. The loss of intellectual property protection or the inability to secure or enforce the protection of our intellectual property assets could have a material adverse effect on our business and our ability to compete.

We also may be subject to costly litigation in the event that another party alleges our operations or activities infringe upon their intellectual property rights. Third parties may have, or may eventually be issued, patents that could be infringed by our products, systems, methods, processes or services. Any party that holds such a patent could make a claim of infringement against us. We may be subject to patent claims from certain individuals and companies who have acquired patent portfolios for the sole purpose of asserting such claims against other companies. We may also be subject to claims by third parties for breach of copyright, trademark, patent, trade secret or license usage rights. Any such claims and any resulting litigation could result in significant liability for damages. If we were found to have infringed a third-party patent or other intellectual property rights, we could incur substantial liability, and in some circumstances could be enjoined from providing certain products or services to our customers or utilizing and benefiting from certain methods, processes, systems, copyrights, trademarks, trade secrets or licenses, or alternatively could be required to enter into costly licensing arrangements with third parties, all of which could have a material adverse effect on our business, results of operations and financial condition.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

The Company's principal executive offices are located in Hartford, Connecticut and it owns the facilities located in Windsor, Connecticut. The Company believes its properties and facilities are suitable and adequate for current operations.

Item 3. LEGAL PROCEEDINGS

Litigation

The Company is involved in claims litigation arising in the ordinary course of business with respect to life, disability and accidental death and dismemberment insurance policies and with respect to annuity contracts. The Company accounts for such activity through the establishment of reserves for future policy benefits and unpaid loss and loss adjustment expense reserves. Management expects that the ultimate liability, if any, with respect to such ordinary-course claims litigation, after consideration of provisions made for potential losses and costs of defense, will not be material to the consolidated financial condition, results of operations or cash flows of the Company.

The Company is also involved in other kinds of legal actions, some of which assert claims for substantial amounts. Such actions have alleged, for example, bad faith in the handling of insurance claims and improper sales practices in connection with the sale of insurance and investment products. Some of these actions also seek punitive damages. Management expects that the ultimate liability, if any, with respect to such lawsuits, after consideration of provisions made for estimated losses, will not be material to the consolidated financial condition of the Company. Nonetheless, given the large or indeterminate amounts sought in certain of these actions, and the inherent unpredictability of litigation, it is possible that an adverse outcome in certain matters could, from time to time, have a material adverse effect on the Company's consolidated results of operations or cash flows in particular quarterly or annual periods.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR HARTFORD LIFE INSURANCE COMPANY'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

All of the Company's outstanding shares are ultimately owned by Hartford Life, Inc, which is a subsidiary of The Hartford. As of February 26, 2016, the Company had issued and outstanding 1,000 shares of common stock, \$5,690 par value per share. There is no established public trading market for the Company's common stock.

For a discussion regarding the Company's payment of dividends, and the restrictions related thereto, see the Capital Resources and Liquidity section of the MD&A under "Dividends".

Item 6. SELECTED FINANCIAL DATA

Omitted pursuant to General Instruction I(2)(a) of Form 10-K.

**Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION
AND RESULTS OF OPERATIONS**

(Dollar amounts in millions unless otherwise stated)

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") addresses the financial condition of Hartford Life Insurance Company and its subsidiaries ("Hartford Life Insurance Company" or the "Company") as of and for the year ended December 31, 2015 compared with the comparable 2014 periods. Management's narrative analysis of the results of operations is presented pursuant to General Instruction I (2) (a) of Form 10-K. This discussion should be read in conjunction with the Consolidated Financial Statements and related Notes beginning on page F-1. Certain reclassifications have been made to prior year financial information to conform to the current year presentation.

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CONSOLIDATED RESULTS OF OPERATIONS

Operating Summary

| | 2015 | 2014 |
|---|---------------|---------------|
| Fee income and other | \$ 1,097 | \$ 1,210 |
| Earned premiums | 92 | 32 |
| Net investment income | 1,456 | 1,543 |
| Net realized capital gains (losses) | (146) | 577 |
| Total revenues | 2,499 | 3,362 |
| Benefits, losses and loss adjustment expenses | 1,402 | 1,460 |
| Amortization of deferred policy acquisition costs | 69 | 206 |
| Insurance operating costs and other expenses | 524 | 851 |
| Reinsurance gain on disposition | (28) | (23) |
| Dividends to policyholders | 2 | 7 |
| Total benefits, losses and expenses | 1,969 | 2,501 |
| Income before income taxes | 530 | 861 |
| Income tax expense | 30 | 184 |
| Net income | 500 | 677 |
| Net income attributable to noncontrolling interest | — | 1 |
| Net income attributable to Hartford Life Insurance Company | \$ 500 | \$ 676 |

December 31, 2015 compared to the year ended December 31, 2014

Net income decreased for the year ended December 31, 2015, as compared to the prior year. The decrease in net income is largely due to a change to net realized capital losses from net realized capital gains, lower fee income and lower net investment income partially offset by a decrease in amortization of deferred policy acquisition costs driven by an unlock benefit due to assumption changes and lower insurance operating costs and other expenses due to the continued runoff of the business.

Fee income and other for the year ended December 31, 2015, decreased as compared to the prior year primarily driven by the decline in account values as a result of the continued run off of the business.

Net investment income decreased for the year ended December 31, 2015, as compared to the prior year due to a decrease in income from limited partnerships and other alternative investments. For further discussion, see MD&A - Investments Results, Net Investment Income (Loss).

Net realized capital losses of \$146 for the year ended December 31, 2015, decreased from net realized capital gains of \$577, as compared to the prior year. Net realized capital losses for 2015 were primarily due to losses from the variable annuity hedge program. Net realized capital gains for 2014 included net gains on derivatives associated with guaranteed minimum income benefit ("GMIB"), guaranteed minimum accumulation benefit ("GMAB"), and GMWB reinsurance contracts that were driven by the sale of HLIKK and the realized capital loss on the concurrent recapture of the reinsurance contracts. For further information, see MD&A - Investment Results, Net Realized Capital Gains (Losses).

The effective tax rate differs from the U.S. Federal statutory rate of 35% in 2015 and 2014, primarily due to the separate account dividends received deduction. The Company recorded benefits of \$152 and \$109 related to the separate account DRD for the years ended December 31, 2015 and 2014, respectively. Income tax expense decreased by \$154 for year ended December 31, 2015, as compared to the prior year, due to a decrease in income before income taxes and a \$36 net reduction in the provision for income taxes from intercompany tax settlements. For a reconciliation of the income tax provision at the U.S. Federal statutory rate to the provision for income taxes, see Note 8 - Income Taxes of Notes to Consolidated Financial Statements.

INVESTMENT RESULTS

Composition of Invested Assets

| | December 31, 2015 | | December 31, 2014 | |
|---|-------------------|-------------|-------------------|-------------|
| | Amount | Percent | Amount | Percent |
| Fixed maturities, available-for-sale ("AFS"), at fair value | \$ 24,657 | 77.7% | \$ 25,436 | 73.3% |
| Fixed maturities, at fair value using the fair value option ("FVO") | 165 | 0.5% | 280 | 0.8% |
| Equity securities, AFS, at fair value [1] | 459 | 1.5% | 514 | 1.5% |
| Mortgage loans | 2,918 | 9.2% | 3,109 | 9.0% |
| Policy loans, at outstanding balance | 1,446 | 4.6% | 1,430 | 4.1% |
| Limited partnerships and other alternative investments | 1,216 | 3.8% | 1,309 | 3.8% |
| Other investments [2] | 293 | 0.9% | 442 | 1.3% |
| Short-term investments | 572 | 1.8% | 2,162 | 6.2% |
| Total investments | \$ 31,726 | 100% | \$ 34,682 | 100% |

[1] Includes equity securities at fair value using the FVO of \$281 and \$248 as of December 31, 2015 and 2014, respectively.

[2] Primarily relates to derivative instruments.

Total investments decreased since December 31, 2014, primarily as a result of a decline in short-term investments, fixed maturities, AFS and other investments. The decrease in short-term investments was primarily the result of capital distribution paid to The Hartford, the continued runoff of the Company's business, and the reinvestment of short-term investments into longer dated fixed maturities. The decrease in fixed maturities, AFS was due to a decrease in valuations as a result of widening credit spreads and an increase in interest rates, which more than offset the reinvestment of short-term investments. The decrease in other investments was primarily due to a decline in derivatives resulting from termination of open positions and an increase in interest rates.

Net Investment Income

| | For the years ended December 31, | | | |
|---|----------------------------------|-------------|-----------------|-------------|
| | 2015 | | 2014 | |
| | Amount | Yield [1] | Amount | Yield [1] |
| <i>(Before-tax)</i> | | | | |
| Fixed maturities [2] | \$ 1,095 | 4.7% | \$ 1,113 | 4.4% |
| Equity securities | 7 | 2.1% | 14 | 4.0% |
| Mortgage loans | 152 | 5.0% | 156 | 4.7% |
| Policy loans | 82 | 5.7% | 80 | 5.6% |
| Limited partnerships and other alternative investments | 97 | 8.1% | 141 | 11.1% |
| Other [3] | 82 | | 111 | |
| Investment expense | (59) | | (72) | |
| Total net investment income | \$ 1,456 | 4.7% | \$ 1,543 | 4.6% |
| Total net investment income excluding limited partnerships and other alternative investments | \$ 1,359 | 4.6% | \$ 1,401 | 4.3% |

[1] Yields calculated using annualized net investment income divided by the monthly average invested assets at cost, amortized cost, or adjusted carrying value, as applicable, excluding repurchase agreement and securities lending collateral, if any, and derivatives book value. Yield calculations for each period exclude assets associated with the disposition of the Japan annuities business, as applicable.

[2] Includes net investment income on short-term investments.

[3] Primarily includes income from derivatives that qualify for hedge accounting and hedge fixed maturities.

Year ended December 31, 2015, compared to the year ended December 31, 2014

Total net investment income decreased primarily due to a decrease in income from limited partnerships and other alternative investments. Other factors contributing to the decline in net investment income were a decrease in assets related to the the disposition of the Japan annuities business, as well as the continued runoff of the Company's businesses, partially offset by higher income received from previously impaired securities, make-whole payments on fixed maturities, and prepayment penalties on mortgage loans.

The annualized net investment income yield, excluding limited partnerships and other alternative investments, increased to 4.6% in 2015 versus 4.3% in 2014. The increase was primarily attributable to higher income received from previously impaired securities, make-whole payments on fixed maturities and prepayment penalties on mortgage loans. The new money yield, excluding certain U.S. Treasury securities and cash equivalent securities, for the year ended December 31, 2015 was approximately 3.4%, which was below the average yield of sales and maturities of 3.8% for the same period primarily due to the current interest rate environment. For the year ended December 31, 2015, the new money yield of 3.4% decreased slightly from 3.6% in 2014 largely due to lower interest rates.

Going forward, if interest rates continue to stay at current levels, we expect the annualized net investment income yield, excluding limited partnerships and other alternative investments to decline from the current net investment income yield due to lower reinvestment rates. The estimated impact on net investment income is subject to change as the composition of the portfolio changes through normal portfolio management and trading activities and changes in market conditions.

Net Realized Capital Gains (Losses)

| <i>(Before-tax)</i> | For the years ended December 31, | |
|--|----------------------------------|---------------|
| | 2015 | 2014 |
| Gross gains on sales | \$ 239 | \$ 264 |
| Gross losses on sales | (211) | (235) |
| Net other-than-temporary impairment ("OTTI") losses recognized in earnings | (61) | (29) |
| Valuation allowances on mortgage loans | (4) | (4) |
| Japanese fixed annuity contract hedges, net [1] | — | (14) |
| Periodic net coupon settlements on credit derivatives | 6 | 11 |
| Results of variable annuity hedge program | | |
| GMWB derivatives, net | (87) | 5 |
| Macro hedge program | (46) | (11) |
| Total U.S. program | (133) | (6) |
| International program | — | (126) |
| Total results of variable annuity hedge program | (133) | (132) |
| GMIB/GMAB/GMWB reinsurance | — | 579 |
| Modified coinsurance reinsurance contracts | 46 | 395 |
| Other, net [2] | (28) | (258) |
| Net realized capital gains | \$ (146) | \$ 577 |

[1] Relates to the Japanese fixed annuity product (adjustment of product liability for changes in spot currency exchange rates, related derivative hedging instruments, excluding net periodic coupon settlements, and Yen denominated Japan FVO securities).

[2] Primarily consists of changes in value of non-qualifying derivatives and the yen denominated fixed payout annuity hedge. Also includes for the year ended December 31, 2014 a loss related to the recapture of the GMIB/GMAB/GMWB reinsurance contracts, which is offset by gains on the termination of the reinsurance derivative reflected in the GMIB/GMAB/GMWB reinsurance line.

Details on the Company's net realized capital gains and losses are as follows:

Gross Gains and Losses on Sales

- Gross gains on sales for the year ended December 31, 2015, were primarily due to gains on the sale of corporate, U.S. treasury, and equity securities. Gross losses on sales for the year ended December 31, 2015, were primarily the result of losses on the sale of corporate, equity and U.S. treasury securities. The sales were primarily a result of duration, liquidity and credit management, as well as tactical changes to the portfolio as a result of changing market conditions, including sales to reduce exposure to energy, emerging markets and other below investment grade corporate securities.
- Gross gains on sales for the year ended December 31, 2014, were primarily due to gains on the sale of corporate securities, CMBS, RMBS, and municipals. Gross losses on sales for the year ended December 31, 2014, were the result of losses on the sale of corporate and foreign government and government agency securities, which included sales resulting from a reduction in our exposure to emerging market and energy sector securities as well as other portfolio management activities. The sales were primarily a result of duration, liquidity, and credit management, as well as tactical changes to the portfolio as a result of changing market conditions.

Net OTTI Losses

- See Other-Than-Temporary Impairments within the Investment Portfolio Risks and Risk Management section of the MD&A.

Valuation Allowances on Mortgage Loans

- See MD&A - Investment Portfolio Risks and Risk Management - Valuation Allowances on Mortgage Loans.

Variable Annuity Hedge Program

- For the year ended December 31, 2015, the loss related to the combined GMWB derivatives, net, which include the GMWB product, reinsurance, and hedging derivatives, was primarily driven by losses of \$42 due to liability/model assumption updates, and losses of \$18 resulting from an underperformance of the underlying actively managed funds compared to their respective indices. The loss on the macro hedge program for the year ended December 31, 2015 was primarily due to a loss of \$44 driven by time decay on options.
- For the year ended December 31, 2014, the gain related to the combined GMWB derivatives, net, which include the GMWB product, reinsurance, and hedging derivatives, was primarily driven by gains of \$25 on liability/model assumption updates and gains of \$15 due to increased volatility, partially offset by a loss of \$26 resulting from policyholder behavior primarily related to increased surrenders. The loss on the macro hedge program for the year ended December 31, 2014, was primarily due to a loss of \$25 driven by an improvement in the domestic equity markets, partially offset by a gain of \$17 related to a decrease in interest rates. The loss on the international program for the year ended December 31, 2014, was primarily driven by an improvement in global equity markets and depreciation of the Japanese yen in relation to the euro.

GMIB/GMAB/GMWB Reinsurance

- The net gain for the year ended December 31, 2014, was driven by the sale of HLIKK and concurrent recapture of the reinsurance contracts. For further discussion on the sale, see Note 1 - Basis of Presentation and Significant Accounting Policies of Notes to the Consolidated Financial Statements.

Modified Coinsurance Reinsurance

- The net gain for the year ended December 31, 2015, was primarily driven by widening credit spreads and an increase in interest rates. Modified coinsurance reinsurance contracts are accounted for as embedded derivatives and transfer to the reinsurer the investment experience related to the assets supporting the reinsured policies.
- The net gain for the year ended December 31, 2014, was primarily due to the termination of a certain contract, which was with an affiliated captive reinsurer and was accounted for as an embedded derivative. For a discussion related to the reinsurance agreement and the termination, refer to Note 4 - Reinsurance, and Note 10 - Transactions with Affiliates of the Notes to the Consolidated Financial Statements.

Other, net

- Other, net loss for the year ended December 31, 2015 was primarily due to losses of \$16 related to fixed payout annuity hedges primarily driven by an increase in interest rates, losses of \$8 on interest rate derivatives driven by an increase in interest rates and losses of \$7 on credit derivatives driven by widening credit spreads.
- Other, net loss for the year ended December 31, 2014, was primarily due to losses of \$213 related to the recapture of the GMIB/GMAB/GMWB reinsurance contracts, which was offset by gains of \$410 on the termination of the reinsurance derivative reflected in the GMIB/GMAB/GMWB reinsurance line. Additional losses of \$32 for the year ended December 31, 2014 were related to the fixed payout annuity hedge, primarily driven by a decline in interest rates and a depreciation of the Japanese yen in relation to the U.S. dollar.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States of America ("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 at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ, and in the past have differed, from those estimates.

The Company has identified the following estimates as critical in that they involve a higher degree of judgment and are subject to a significant degree of variability:

- estimated gross profits used in the valuation and amortization of assets and liabilities associated with variable annuity and other universal life-type contracts;
- evaluation of other-than-temporary impairments on available-for-sale securities and valuation allowances on mortgage loans;
- living benefits required to be fair valued (in other policyholder funds and benefits payable);
- valuation of investments and derivative instruments;
- valuation allowance on deferred tax assets; and
- contingencies relating to corporate litigation and regulatory matters.

Certain of these estimates are particularly sensitive to market conditions, and deterioration and/or volatility in the worldwide debt or equity markets could have a material impact on the Consolidated Financial Statements. In developing these estimates management makes subjective and complex judgments that are inherently uncertain and subject to material change as facts and circumstances develop. Although variability is inherent in these estimates, management believes the amounts provided are appropriate based upon the facts available upon compilation of the financial statements.

Estimated Gross Profits Used in the Valuation and Amortization of Assets and Liabilities Associated with Variable Annuity and Other Universal Life-Type Contracts

Estimated gross profits ("EGPs") are used in the amortization of the deferred policy acquisition cost ("DAC") asset and sales inducement assets ("SIA"). Portions of EGPs are also used in the valuation of reserves for death and other insurance benefit features on variable annuity and other universal life-type contracts.

The most significant EGP based balances are as follows:

| | As of December 31, | |
|--|--------------------|--------|
| | 2015 | 2014 |
| DAC [1] | \$ 542 | \$ 521 |
| Death and Other Insurance Benefit Reserves, net of reinsurance [2] | \$ 340 | \$ 332 |

[1] For additional information on DAC, see Note 5 - Deferred Policy Acquisition Costs of Notes to Consolidated Financial Statements.

[2] For additional information on death and other insurance benefit reserves, see Note 6 - Separate Accounts, Death Benefits and Other Insurance Benefit Features of Notes to Consolidated Financial Statements.

Unlocks

The benefit (charge) to net income from continuing operations, net of tax by asset and liability as a result of the Unlock is as follows:

| | For the years ended December 31, | |
|--|----------------------------------|----------------|
| | 2015 | 2014 |
| DAC | \$ 13 | \$ (96) |
| SIA | — | (31) |
| Death and Other Insurance Benefit Reserves | 28 | 33 |
| Total (pre-tax) | 41 | (94) |
| Income tax effect | 14 | (33) |
| Total (after-tax) | \$ 27 | \$ (61) |

The Unlock benefit, after-tax for the year ended December 31, 2015 was primarily due to assumption changes related to benefit utilization and lower assumed lapse rates, partially offset by a lower assumed general account spread and higher assumed withdrawal rates.

The Unlock charge for the year ended December 31, 2014 was primarily due to lower future estimated gross profits on the fixed annuity block driven by the continued low interest rate environment as well as a higher expected variable annuity units costs due to higher than expected surrenders, partially offset by actual separate accounts returns being above our aggregated estimated returns during the period.

The Unlock charge for the year ended December 31, 2013 was primarily due to assumption changes in connection with the annual policyholder behavior assumption study, partially offset by actual separate account returns above our aggregated estimated returns during the period.

For most annuity contracts, the Company estimates gross profits over 20 years as EGPs emerging subsequent to that time frame are immaterial. Products sold in a particular year are aggregated into cohorts. Future gross profits for each cohort are projected over the estimated lives of the underlying contracts, based on future account value projections for variable annuity products. The projection of future account values requires the use of certain assumptions including: separate account returns; separate account fund mix; fees assessed against the contract holder's account balance; surrender and lapse rates; interest margin; mortality; and the extent and duration of hedging activities and hedging costs. Changes in these assumptions and changes to other policyholder behavior assumptions such as resets, partial surrenders, reaction to price increases, and asset allocations cause EGPs to fluctuate which impacts earnings.

The Company determines EGPs from a single deterministic reversion to mean ("RTM") separate account return projection which is an estimation technique commonly used by insurance entities to project future separate account returns. Through this estimation technique, the Company's DAC model is adjusted to reflect actual account values at the end of each quarter. Through consideration of recent market returns, the Company will unlock, or adjust, projected returns over a future period so that the account value returns to the long-term expected rate of return, providing that those projected returns do not exceed certain caps. The Unlock for future separate account returns is determined each quarter. Under RTM, the expected long term rate of return is 8.3 %.

In the fourth quarter of 2015, the Company completed a comprehensive policyholder behavior assumption study which resulted in a non-market related after-tax expense of \$21 and incorporated the results of that study into its projection of future gross profits. Additionally, throughout the year, the Company evaluates various aspects of policyholder behavior and will revise its policyholder assumptions if credible emerging data indicates that changes are warranted. The Company will continue to evaluate its assumptions related to policyholder behavior as initiatives to reduce the size of the annuity business are implemented by management. Upon completion of an annual assumption study or evaluation of credible new information, the Company will revise its assumptions to reflect its current best estimate. These assumption revisions will change the projected account values and the related EGPs in the DAC amortization models, as well as the death and other insurance benefit reserving model.

All assumption changes that affect the estimate of future EGPs including: the update of current account values; the use of the RTM estimation technique; and policyholder behavior assumptions, are considered an Unlock in the period of revision. An Unlock adjusts DAC and death and other insurance benefit reserve balances in the Consolidated Balance Sheets with an offsetting benefit or charge in the Consolidated Statements of Operations in the period of the revision. An Unlock that results in an after-tax benefit generally occurs as a result of actual experience or future expectations of product profitability being favorable compared to previous estimates. An Unlock that results in an after-tax charge generally occurs as a result of actual experience or future expectations of product profitability being unfavorable compared to previous estimates.

EGPs are also used to determine the expected excess benefits and assessments included in the measurement of death and other insurance benefit reserves. These excess benefits and assessments are derived from a range of stochastic scenarios that have been calibrated to the Company's RTM separate account returns. The determination of death and other insurance benefit reserves is also impacted by discount rates, lapses, volatilities, mortality assumptions and benefit utilization, including assumptions around annuitization rates.

In addition to updating assumptions in the fourth quarter of each year, an Unlock revises EGPs, on a quarterly basis, to reflect the Company's current best estimate assumptions and market updates of policyholder account value. Modifications to the Company's hedging programs may impact EGPs, and correspondingly impact DAC recoverability. After each quarterly Unlock, the Company also tests the aggregate recoverability of DAC by comparing the DAC balance to the present value of future EGPs. The margin between the DAC balance and the present value of future EGPs for variable annuities was 32% as of December 31, 2015. If the margin between the DAC asset and the present value of future EGPs is exhausted, then further reductions in EGPs would cause portions of DAC to be unrecoverable and the DAC asset would be written down to equal future EGPs.

Living Benefits Required to be Fair Valued (in Other Policyholder Funds and Benefits Payable)

Fair values for GMWBs classified as embedded derivatives are calculated using the income approach based upon internally developed models because active, observable markets do not exist for those items. The fair value of these GMWBs and the related reinsurance and customized freestanding derivatives are calculated as an aggregation of the following components: Best Estimate Claim Payments; Credit Standing Adjustment; and Margins. The resulting aggregation is reconciled or calibrated, if necessary, to market information that is, or may be, available to the Company, but may not be observable by other market participants, including reinsurance discussions and transactions. The Company believes the aggregation of these components, as necessary and as reconciled or calibrated to the market information available to the Company, results in an amount that the Company would be required to transfer to or receive from market participants in an active liquid market, if one existed, for those market participants to assume the risks associated with the guaranteed minimum benefits and the related reinsurance and customized derivatives. The fair value is likely to materially diverge from the ultimate settlement of the liability as the Company believes settlement will be based on our best estimate assumptions rather than those best estimate assumptions plus risk margins. In the absence of any transfer of the guaranteed benefit liability to a third party, the release of risk margins is likely to be reflected as realized gains in future periods' net income. Each component described in the following discussion is unobservable in the marketplace and requires subjectivity by the Company in determining its value.

Oversight of the Company's valuation policies and processes for product and GMWB reinsurance derivatives is performed by a multidisciplinary group comprised of finance, actuarial and risk management professionals. This multidisciplinary group reviews and approves changes and enhancements to the Company's valuation model as well as associated controls.

Valuation of Investments and Derivative Instruments

Fixed Maturities, AFS; Equity Securities, AFS; Equity Securities, FVO; Fixed Maturities, FVO, Equity Securities, Trading, and Short-term Investments

The fair value of fixed maturities, equity securities, and short-term investments in an active and orderly market (i.e., not distressed or forced liquidation) are determined by management after considering the following pricing sources: quoted prices for identical assets or liabilities, prices from third-party pricing services, independent broker quotations or internal matrix pricing processes. Security pricing is applied using a "waterfall" approach whereby publicly available prices are first sought from third-party pricing services, any remaining unpriced securities are submitted to independent brokers for prices, or lastly, securities are priced using an internal pricing matrix. Typical inputs used by these pricing sources include, but are not limited to benchmark yields, reported trades, broker/dealer quotes, issuer spreads, benchmark securities, bids, offers, and/or estimated cash flows, prepayment speeds and default rates. Most fixed maturities do not trade daily. Based on the typical trading volumes and the lack of quoted market prices for fixed maturities, third-party pricing services utilize matrix pricing to derive security prices. Matrix pricing relies on securities' relationships to other benchmark quoted securities, which trade more frequently. Pricing services utilize recently reported trades of identical or similar securities making adjustments through the reporting date based on the preceding outlined available market observable information. If there are no recently reported trades, the third-party pricing services may develop a security price using expected future cash flows based upon collateral performance and discounted at an estimated market rate. Both matrix pricing and discounted cash flow techniques develop prices by factoring in the time value for cash flows and risk, including liquidity and credit.

Included in the pricing of asset-backed-securities ("ABS") and residential mortgage-backed securities ("RMBS") are estimates of the rate of future prepayments of principal over the remaining life of the securities. Such estimates are derived based upon the characteristics of the underlying structure and prepayment speeds previously experienced at the interest rate levels projected for the underlying collateral. Actual prepayment experience may vary from these estimates. For further discussion, see the AFS Securities, Equity Securities, FVO, Fixed Maturities, FVO, Equity Securities, Trading, and Short-Term Investments section in Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

The Company has analyzed the third-party pricing services' valuation methodologies and related inputs, and has also evaluated the various types of securities in its investment portfolio to determine an appropriate fair value hierarchy level based upon trading activity and the observability of market inputs. For further discussion of fair value measurement, see Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

Derivative Instruments, excluding embedded derivatives within liability contracts and reinsurance related derivatives

The fair value of derivative instruments is determined using pricing valuation models for over-the-counter ("OTC") derivatives that utilize market data inputs, quoted market prices for exchanged-traded derivatives and transactions cleared through central clearing houses ("OTC-cleared"), or independent broker quotations. Excluding embedded and reinsurance related derivatives, as of December 31, 2015 and 2014, 94% and 95%, respectively, of derivatives, based upon notional values, were priced by valuation models or quoted market prices. The remaining derivatives were priced by broker quotations. The derivatives are valued using mid-market level inputs that are predominantly observable in the market with the exception of the customized swap contracts that hedge GMWB liabilities. Inputs used to value derivatives include, but are not limited to, swap interest rates, foreign currency forward and spot rates, credit spreads and correlations, interest and equity volatility and equity index levels. For further discussion on derivative instrument valuation methodologies, see the Derivative Instruments, including embedded derivatives within the investments section in Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements. For further discussion on GMWB and other guaranteed living benefits, valuation methodologies, see the Living Benefits Required to be Fair Valued section in Note 2 of the Notes to Consolidated Financial Statements.

Evaluation of Other-Than-Temporary Impairments on Available-for-Sale Securities and Valuation Allowances on Mortgage Loans

The Company has a monitoring process overseen by a committee of investment and accounting professionals which identifies investments that are subject to an enhanced evaluation on a quarterly basis to determine if an other-than-temporary impairment ("impairment") is present for AFS securities or a valuation allowance is required for mortgage loans. This evaluation is a quantitative and qualitative process, which is subject to risks and uncertainties. For further discussion of the accounting policies, see Note 1 - Basis of Presentation and Significant Accounting Policies of Notes to Consolidated Financial Statements. For a discussion of impairments recorded, see the Other-Than-Temporary Impairments within the Investment Portfolio Risks and Risk Management section of the MD&A.

Valuation Allowance on Deferred Tax Assets

Deferred tax assets represent the tax benefit of future deductible temporary differences and tax credit carryforwards. Deferred tax assets are measured using the enacted tax rates expected to be in effect when such benefits are realized if there is no change in tax law. Under U.S. GAAP, we test the value of deferred tax assets for impairment on a quarterly basis at the entity level within each tax jurisdiction, consistent with our filed tax returns. Deferred tax assets are reduced by a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. The determination of the valuation allowance for our deferred tax assets requires management to make certain judgments and assumptions. In evaluating the ability to recover deferred tax assets, we have considered all available evidence as of December 31, 2015 including past operating results, forecasted earnings, future taxable income, and prudent and feasible tax planning strategies. In the event we determine it is more likely than not that we will not be able to realize all or part of our deferred tax assets in the future, an increase to the valuation allowance would be charged to earnings in the period such determination is made. Likewise, if it is later determined that it is more likely than not that those deferred tax assets would be realized, the previously provided valuation allowance would be reversed. Our judgments and assumptions are subject to change given the inherent uncertainty in predicting future performance and specific industry and investment market conditions.

As of December 31, 2015 and 2014, the Company had no valuation allowance. In assessing the need for a valuation allowance, management considered future taxable temporary difference reversals, future taxable income exclusive of reversing temporary differences and carryovers, taxable income in open carry back years and other tax planning strategies. From time to time, tax planning strategies could include holding a portion of debt securities with market value losses until recovery, altering the level of tax exempt securities held, making investments which have specific tax characteristics, and business considerations such as asset-liability matching. Management views such tax planning strategies as prudent and feasible and would implement them, if necessary, to realize the deferred tax assets.

Contingencies Relating to Corporate Litigation and Regulatory Matters

Management evaluates each contingent matter separately. A loss is recorded if probable and reasonably estimable. Management establishes reserves for these contingencies at its "best estimate," or, if no one number within the range of possible losses is more probable than any other, the Company records an estimated reserve at the low end of the range of losses.

The Company has a quarterly monitoring process involving legal and accounting professionals. Legal personnel first identify outstanding corporate litigation and regulatory matters posing a reasonable possibility of loss. These matters are then jointly reviewed by accounting and legal personnel to evaluate the facts and changes since the last review in order to determine if a provision for loss should be recorded or adjusted, the amount that should be recorded, and the appropriate disclosure. The outcomes of certain contingencies currently being evaluated by the Company, which relate to corporate litigation and regulatory matters, are inherently difficult to predict, and the reserves that have been established for the estimated settlement amounts are subject to significant changes. Management expects that the ultimate liability, if any, with respect to such lawsuits, after consideration of provisions made for estimated losses, will not be material to the consolidated financial condition of the Company. In view of the uncertainties regarding the outcome of these matters, as well as the tax-deductibility of payments, it is possible that the ultimate cost to the Company of these matters could exceed the reserve by an amount that would have a material adverse effect on the Company's consolidated results of operations and liquidity in a particular quarterly or annual period.

ENTERPRISE RISK MANAGEMENT

The Company's risk management function is part of The Hartford's overall risk management program. The Hartford has an enterprise risk management function ("ERM") that is charged with providing analysis of The Hartford's risks on an individual and aggregated basis and with ensuring that The Hartford's risks remain within its risk appetite and tolerances. The Hartford has established the Enterprise Risk and Capital Committee ("ERCC") that includes The Hartford's CEO, President, Chief Financial Officer, Chief Investment Officer, Chief Risk Officer, General Counsel and others as deemed necessary by the committee chair. The ERCC is responsible for managing The Hartford's risks and overseeing the enterprise risk management program.

Financial Risk Management

The Company is exposed to financial risk associated with changes in interest rates, credit spreads including issuer defaults, equity prices or market indices, and foreign currency exchange rates. The Company is also exposed to credit and counterparty repayment risk. Derivative instruments are utilized in compliance with established Company policy and regulatory requirements to achieve one of four Company-approved objectives: to hedge risk arising from interest rate, equity market, commodity market, credit spread and issuer default, price or currency exchange rate risk or volatility; to manage liquidity; to control transaction costs; or to enter into synthetic replication transactions. Exposures are actively monitored, and mitigated where appropriate.

Liquidity Risk

Liquidity risk is the risk to current or prospective earnings or capital arising from the Company's inability or perceived inability to meet its contractual cash obligations at the legal entity level when they come due over given time horizons without incurring unacceptable costs and without relying on uncommitted funding sources.

The Hartford has defined ongoing monitoring and reporting requirements to assess liquidity across the enterprise under both current and stressed market conditions. The Hartford measures and manages liquidity risk exposures and funding needs within prescribed limits and across legal entities taking into account legal, regulatory and operational limitations to the transferability of liquidity. The Hartford also monitors internal and external conditions, and identifies material risk changes and emerging risks that may impact liquidity.

For further discussion on liquidity see the section on Capital Resources and Liquidity.

Interest Rate Risk

Interest rate risk is the risk of financial loss due to adverse changes in the value of assets and liabilities arising from movements in interest rates. Interest rate risk encompasses exposures with respect to changes in the level of interest rates, the shape of the term structure of rates and the volatility of interest rates. Interest rate risk does not include exposure to changes in credit spreads. The Company has exposure to interest rates arising from its fixed maturity securities and interest sensitive liabilities.

An increase in interest rates from current levels is generally a favorable development for the Company. Interest rate increases are expected to provide additional net investment income, reduce the cost of the variable annuity hedging program, and limit the potential risk of margin erosion due to minimum guaranteed crediting rates in certain products. However, if long-term interest rates rise dramatically within a six to twelve month time period, certain businesses may be exposed to disintermediation risk. Disintermediation risk refers to the risk that policyholders will surrender their contracts in a rising interest rate environment requiring the Company to liquidate assets in an unrealized loss position. In conjunction with the interest rate risk measurement and management techniques, certain fixed income product offerings have market value adjustment provisions at contract surrender. An increase in interest rates may also impact the Company's tax planning strategies and in particular its ability to utilize tax benefits of previously recognized realized capital losses.

A decline in interest rates results in certain mortgage-backed and municipal securities being more susceptible to paydowns and prepayments or calls. During such periods, the Company generally will not be able to reinvest the proceeds at comparable yields. Lower interest rates will also likely result in lower net investment income, increased hedging costs associated with variable annuities and, if declines are sustained for a long period of time, it may subject the Company to reinvestment risk and possibly reduced profit margins associated with guaranteed crediting rates on certain products. Conversely, the fair value of the investment portfolio will increase when interest rates decline and the Company's interest expense will be lower on its variable rate debt obligations.

The Company manages its exposure to interest rate risk by constructing investment portfolios that maintain asset allocation limits and asset/liability duration matching targets which may include the use of derivatives. The Company analyzes interest rate risk using various models including parametric models and cash flow simulation under various market scenarios of the liabilities and their supporting investment portfolios which may include derivative instruments. Key metrics that the Company uses to quantify its exposure to interest rate risk inherent in its invested assets and interest rate sensitive liabilities include duration, convexity and key rate duration. Duration is the price sensitivity of a financial instrument or series of cash flows to a parallel change in the underlying yield curve used to value the financial instrument or series of cash flows. For example, a duration of 5 means the price of the security will change by approximately 5% for a 100 basis point change in interest rates. Convexity is used to approximate how the duration of a security changes as interest rates change in a parallel manner. Key rate duration analysis measures the price sensitivity of a security or series of cash flows to each point along the yield curve and enables the Company to estimate the price change of a security assuming non-parallel interest rate movements.

To calculate duration, convexity, and key rate durations, projections of asset and liability cash flows are discounted to a present value using interest rate assumptions. These cash flows are then revalued at alternative interest rate levels to determine the percentage change in fair value due to an incremental change in the entire yield curve for duration and convexity, or a particular point on the yield curve for key rate duration. Cash flows from corporate obligations are assumed to be consistent with the contractual payment streams on a yield to worst basis. Yield to worst is a basis that represents the lowest potential yield that can be received without the issuer actually defaulting. The primary assumptions used in calculating cash flow projections include expected asset payment streams taking into account prepayment speeds, issuer call options and contract holder behavior. Mortgage-backed and asset-backed securities are modeled based on estimates of the rate of future prepayments of principal over the remaining life of the securities. These estimates are developed by incorporating collateral surveillance and anticipated future market dynamics. Actual prepayment experience may vary from these estimates.

The investments and liabilities primarily associated with interest rate risk are included in the following discussion. Certain product liabilities, including those containing GMWB or GMDB, expose the Company to interest rate risk but also have significant equity risk. These liabilities are discussed as part of the Variable Product Guarantee Risks and Risk Management section.

Fixed Maturity Investments

The Company's investment portfolios primarily consist of investment grade fixed maturity securities. The fair value of fixed maturity securities was \$24.8 billion and \$ 25.7 billion at December 31, 2015 and 2014 , respectively. The fair value of these and other invested assets fluctuates depending on the interest rate environment and other general economic conditions. The weighted average duration of the portfolio, including fixed maturities, commercial mortgage loans, certain derivatives, and cash equivalents, was approximately 6.6 years and 6.1 years as of December 31, 2015 and 2014 , respectively.

Liabilities

The Company's issued investment contracts and certain insurance product liabilities, other than non-guaranteed separate accounts, include asset accumulation vehicles such as fixed annuities, guaranteed investment contracts, and other investment and universal life-type contracts.

Asset accumulation vehicles primarily require a fixed rate payment, often for a specified period of time, such as fixed rate annuities with a market value adjustment feature. The term to maturity of these contracts generally range from less than one year to ten years. A fixed interest rate is specified in the contract based upon the term selected. These contracts contain surrender values that are based upon a market value adjustment formula if held for shorter periods. The formula typically is based on current interest crediting rates being offered for new market value annuity purchases at the time of contract issuance with terms equal to the remaining term to maturity. The market value adjustment may be positive or negative, depending upon market interest rates at surrender. In addition, certain products such as corporate owned life insurance contracts and the general account portion of variable annuity products, credit interest to policyholders subject to market conditions and minimum interest rate guarantees. The term to maturity of the asset portfolio supporting these products may range from short to intermediate.

While interest rate risk associated with many of these products has been reduced through the use of market value adjustment features and surrender charges, the primary risk associated with these products is that the spread between investment return and credited rate may not be sufficient to earn targeted returns.

The Company also manages the risk of certain insurance liabilities similarly to investment type products due to the relative predictability of the aggregate cash flow payment streams. Products in this category may contain significant reliance upon actuarial pricing assumptions (including mortality and morbidity) and do have some element of cash flow uncertainty. Product examples include structured settlement contracts, and on-benefit annuities (i.e., the annuitant is currently receiving benefits thereon). The cash outflows associated with these policy liabilities are not interest rate sensitive but do vary based on the timing and amount of benefit payments. The primary risks associated with these products are that the benefits will exceed expected actuarial pricing and/or that the actual timing of the cash flows will differ from those anticipated, or interest rate levels earned on the investment portfolio may deviate from those assumed in product pricing, ultimately resulting in an investment return lower than that assumed in pricing. The average duration of the liability cash flow payments can range from less than one year to in excess of fifteen years.

Derivatives

The Company utilizes a variety of derivative instruments to mitigate interest rate risk associated with its investment portfolio or hedge liabilities. Interest rate swaps are primarily used to convert interest receipts or payments to a fixed or variable rate. The use of such swaps enable the Company to customize contract terms and conditions to desired objectives and manage the duration profile within established tolerances. Interest rate swaps are also used to hedge the variability in the cash flow of a forecasted purchase or sale of fixed rate securities due to changes in interest rates. Interest rate caps, floors, swaps, swaptions, and futures may be used to manage portfolio duration.

As of December 31, 2015 and 2014, notional amounts pertaining to derivatives utilized to manage interest rate risk, including offsetting positions, totaled \$ 6.5 billion and \$ 7.1 billion, respectively (\$ 6.4 billion and \$ 7.0 billion, respectively, related to investments and \$ 100 and \$ 100, respectively, related to liabilities). The fair value of these derivatives was \$ (377) and \$ (286) as of December 31, 2015 and 2014, respectively. These amounts do not include derivatives associated with the Variable Annuity Hedging Program.

Interest Rate Sensitivity

Invested Assets Supporting Fixed Liabilities

Included in the following table is the before-tax change in the net economic value of investment contracts (e.g., fixed annuity contracts) for which the payment rates are fixed at contract issuance and the investment experience is substantially absorbed by the Company's operations, along with the corresponding invested assets. Also included in this analysis are the interest rate sensitive derivatives used by the Company to hedge its exposure to interest rate risk in the investment portfolios supporting these contracts. This analysis does not include the assets and corresponding liabilities of certain insurance products such as certain life contingent annuities. Certain financial instruments, such as limited partnerships and other alternative investments, have been omitted from the analysis due to the fact that these investments generally lack sensitivity to interest rate changes. Insulated separate account assets and liabilities are excluded from the analysis because gains and losses in separate accounts accrue to policyholders.

The calculation of the estimated hypothetical change in net economic value below assumes a 100 basis point upward and downward parallel shift in the yield curve.

| Interest rate sensitivity of fixed liabilities and invested assets supporting them | Change in Net Economic Value as of December 31, | | | |
|---|--|--------|-------------|--------|
| | 2015 | | 2014 | |
| <i>Basis point shift</i> | -100 | +100 | -100 | +100 |
| Increase (decrease) in economic value, before tax | \$ (429) | \$ 261 | \$ (474) | \$ 314 |

The carrying value of fixed maturities, commercial mortgage loans and short-term investments related to the businesses included in the table above was \$18.3 billion and \$19.9 billion, as of December 31, 2015 and 2014, respectively. The assets supporting the fixed liabilities are monitored and managed within set duration guidelines, and are evaluated on a daily basis, as well as annually using scenario simulation techniques in compliance with regulatory requirements.

Invested Assets Not Supporting Fixed Liabilities

The following table provides an analysis showing the estimated before-tax change in the fair value of the Company's investments and related derivatives, excluding assets supporting fixed liabilities which are included in the table above, assuming 100 basis point upward and downward parallel shifts in the yield curve as of December 31, 2015 and 2014. Certain financial instruments, such as limited partnerships and other alternative investments, have been omitted from the analysis due to the fact that these investments generally lack sensitivity to interest rate changes.

| Interest rate sensitivity of invested assets not supporting fixed liabilities | Change in Fair Value as of December 31, | | | |
|---|---|----------|--------|----------|
| | 2015 | | 2014 | |
| <i>Basis point shift</i> | -100 | +100 | -100 | +100 |
| Increase (decrease) in fair value, before tax | \$ 454 | \$ (405) | \$ 530 | \$ (471) |

The carrying value of fixed maturities, commercial mortgage loans and short-term investments related to the businesses included in the table above was \$10.0 billion and \$11.1 billion, as of December 31, 2015 and 2014, respectively. The selection of the 100 basis point parallel shift in the yield curve was made only as an illustration of the potential hypothetical impact of such an event and should not be construed as a prediction of future market events. Actual results could differ materially from those illustrated above due to the nature of the estimates and assumptions used in the above analysis. The Company's sensitivity analysis calculation assumes that the composition of invested assets and liabilities remain materially consistent throughout the year and that the current relationship between short-term and long-term interest rates will remain constant over time. As a result, these calculations may not fully capture the impact of portfolio re-allocations, significant product sales or non-parallel changes in interest rates.

Equity Risk

Equity risk is defined as the risk of financial loss due to changes in the value of global equities or equity indices. The Company has exposure to equity risk from assets under management and embedded derivatives within the Company's variable annuities. Equity Risk on the Company's Variable Annuity products is mitigated through various hedging programs. For further information see the Variable Annuity Hedging Program Section.

The Company does not have significant equity risk exposure from invested assets. The Company's exposure to equity risk includes the potential for lower earnings associated with certain of its businesses such as variable annuities where fee income is earned based upon the fair value of the assets under management. For further discussion of equity risk, see the Variable Product Guarantee Risk and Risk Management section. In addition, the Company offers certain guaranteed benefits, primarily associated with variable annuity products, which increases the Company's potential benefit exposure in periods that equity markets decline.

Reinsurance as a Risk Management Strategy

The Company utilizes reinsurance to transfer risk to affiliated and unaffiliated insurers. Reinsurance is used to transfer certain risk to reinsurance companies based on specific risk concentrations. All reinsurance processes are aligned under a single enterprise reinsurance risk management policy. Reinsurance purchasing is a centralized function across The Hartford to support a consistent strategy and to ensure that the reinsurance activities are fully integrated into the organization's risk management processes.

The Company uses third-party reinsurance for a portion of contracts issued with GMWB riders prior to the third quarter of 2003 and GMWB risks associated with a block of business sold between the third quarter of 2003 and the second quarter of 2006. The Company also uses third party reinsurance for a majority of contracts with GMDB risk.

The Company cedes insurance to affiliated and unaffiliated insurers to enable the Company to manage capital and risk exposure. Such arrangements do not relieve the Company of its primary liability to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company. The Company has ceded reinsurance to MassMutual and Prudential, respectively, in connection with the sales of its Retirement Plans and Individual Life businesses in 2013. For further discussion of these transactions, see Note 12 - Discontinued Operations and Business Dispositions of Notes to the Consolidated Financial Statements.

The components of the gross and net reinsurance recoverables are summarized as follows:

| Reinsurance Recoverables | As of December 31, | |
|--|--------------------|-----------|
| | 2015 | 2014 |
| Future policy benefits and unpaid loss and loss adjustment expenses and other policyholder funds and benefits payable | \$ 20,499 | \$ 20,053 |
| Gross reinsurance recoverables | 20,499 | 20,053 |
| Less: Allowance for uncollectible reinsurance [1] | — | — |
| Net reinsurance recoverables | \$ 20,499 | \$ 20,053 |

[1] No allowance for uncollectible reinsurance is required as of December 31, 2015 and 2014.

As of December 31, 2015, the Company has reinsurance recoverables from MassMutual and Prudential of \$8.6 billion and \$10.4 billion, respectively. As of December 31, 2014, the Company has reinsurance recoverables from MassMutual and Prudential of \$8.6 billion and \$10.0 billion, respectively. The Company's obligations to its direct policyholders that have been reinsured to MassMutual and Prudential are secured by invested assets held in trust. Net of invested assets held in trust, as of December 31, 2015, the Company has \$1.6 billion of reinsurance recoverables from Prudential representing approximately 20% of the Company's consolidated stockholder's equity. As of December 31, 2015, the Company has no other reinsurance-related concentrations of credit risk greater than 10% of the Company's consolidated stockholder's equity.

Variable Product Guarantee Risks and Risk Management

The Company's variable products are significantly influenced by equity markets. Increases or declines in equity markets impact certain assets and liabilities related to the Company's variable products and the Company's earnings derived from those products. The Company's variable products currently include variable annuity contracts and mutual funds.

Generally, declines in equity markets will:

- reduce the value of assets under management and the amount of fee income generated from those assets;
- increase the liability for GMWB benefits resulting in realized capital losses;
- increase the value of derivative assets used to hedge product guarantees resulting in realized capital gains;
- increase the costs of the hedging instruments we use in our hedging program;
- increase the Company's net amount at risk ("NAR") for GMDB and GMWB benefits;
- increase the amount of required assets to be held backing variable annuity guarantees to maintain required regulatory reserve levels and targeted risk-based capital ("RBC") ratios; and
- decrease the Company's estimated future gross profits, resulting in a DAC unlock charge. See Estimated Gross Profits Used in the Valuation and Amortization of Assets and Liabilities Associated with Variable Annuity Contracts within the Critical Accounting Estimates section of the MD&A for further information.

Generally, increases in equity markets will have the inverse impact of those listed in the preceding discussion. For additional information, see Risk Hedging - Variable Annuity Hedging Program section.

Variable Annuity Guaranteed Benefits

The Company's variable annuities include GMDB and certain contracts with GMDB also include GMWB features. Declines in the equity markets will increase the Company's liability for these benefits. Most contracts with a GMDB include a maximum anniversary value ("MAV"), which in rising markets resets the guarantee on anniversary to be 'at the money'. As the MAV increases, it can increase the NAR for subsequent declines in account value. Generally, a GMWB contract is 'in the money' if the contractholder's guaranteed remaining balance ("GRB") becomes greater than the account value.

The NAR is generally defined as the guaranteed minimum benefit amount in excess of the contractholder's current account value. Variable annuity account values with guarantee features were \$ 44.2 billion and \$ 52.9 billion as of December 31, 2015 and December 31, 2014, respectively.

The following tables summarize the account values of the Company's variable annuities with guarantee features and the NAR split between various guarantee features (retained net amount at risk does not take into consideration the effects of the variable annuity hedge programs currently in place as of each balance sheet date):

Total Variable Annuity Guarantees

As of December 31, 2015

| <i>(\$ in billions)</i> | Account Value | Gross Net Amount at Risk | Retained Net Amount at Risk | % of Contracts In the Money[2] | % In the Money[2] [3] |
|-----------------------------|---------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------|
| Variable Annuity [1] | | | | | |
| GMDB | \$ 44.2 | \$ 4.2 | \$ 1.1 | 55% | 9% |
| GMWB | 20.2 | 0.2 | 0.2 | 11% | 9% |

Total Variable Annuity Guarantees

As of December 31, 2014

| <i>(\$ in billions)</i> | Account Value | Gross Net Amount at Risk | Retained Net Amount at Risk | % of Contracts In the Money[2] | % In the Money[2] [3] |
|-----------------------------|---------------|-----------------------------|--------------------------------|-----------------------------------|--------------------------|
| Variable Annuity [1] | | | | | |
| GMDB | \$ 52.9 | \$ 3.8 | \$ 0.8 | 23% | 14% |
| GMWB | 24.8 | 0.2 | 0.1 | 6% | 11% |

[1] Policies with a guaranteed living benefit also have a guaranteed death benefit. The NAR for each benefit is shown; however these benefits are not additive. When a policy terminates due to death, any NAR related to GMWB is released. Similarly, when a policy goes into benefit status on a GMWB, the GMDB NAR is reduced to zero.

[2] Excludes contracts that are fully reinsured.

[3] For all contracts that are "in the money", this represents the percentage by which the average contract was in the money.

Many policyholders with a GMDB also have a GMWB. Policyholders that have a product that offers both guarantees can only receive the GMDB or GMWB. The GMDB NAR disclosed in the preceding tables is a point in time measurement and assumes that all participants utilize the GMDB benefit on that measurement date. For additional information on the Company's GMDB liability, see Note 6 - Separate Accounts, Death Benefits and Other Insurance Benefit Features of Notes to Consolidated Financial Statements.

The Company expects to incur GMDB payments in the future only if the policyholder has an "in the money" GMDB at their death. For policies with a GMWB rider, the company expects to incur GMWB payments in the future only if the account value is reduced over time to a specified level through a combination of market performance and periodic withdrawals, at which point the contract holder will receive an annuity equal to the GRB which is generally equal to premiums less withdrawals. For the Company's "life-time" GMWB products, this annuity can exceed the GRB. As the account value fluctuates with equity market returns on a daily basis and the "life-time" GMWB payments may exceed the GRB, the ultimate amount to be paid by the Company, if any, is uncertain and could be significantly more or less than the Company's current carried liability. For additional information on the Company's GMWB liability, see Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

Variable Annuity Market Risk Exposures

The following table summarizes the broad Variable Annuity Guarantees offered by the Company and the market risks to which the guarantee is most exposed from a U.S. GAAP accounting perspective.

| Variable Annuity Guarantees [1] | U.S. GAAP Treatment [1] | Primary Market Risk Exposures [1] |
|--|--|--|
| GMDB and life-contingent component of the GMWB | Accumulation of the portion of fees required to cover expected claims, less accumulation of actual claims paid | Equity Market Levels |
| GMWB (excluding life-contingent portions) | Fair Value | Equity Market Levels / Implied Volatility / Interest Rates |

[1] Each of these guarantees and the related U.S. GAAP accounting volatility will also be influenced by actual and estimated policyholder behavior.

Risk Hedging

Variable Annuity Hedging Program

The Company's variable annuity hedging is primarily focused, through the use of reinsurance and capital market derivative instruments, on reducing the economic exposure to market risks associated with guaranteed benefits that are embedded in our variable annuity contracts. The variable annuity hedging also considers the potential impacts on statutory accounting results.

Reinsurance

The Company uses reinsurance for a portion of contracts with GMWB riders issued prior to the third quarter of 2003 and GMWB risks associated with a block of business sold between the third quarter of 2003 and the second quarter of 2006. The Company also uses reinsurance for a majority of the GMDB issued.

Capital Market Derivatives

GMWB Hedge Program

The Company enters into derivative contracts to hedge market risk exposures associated with the GMWB liabilities that are not reinsured. These derivative contracts include customized swaps, interest rate swaps and futures, and equity swaps, options, and futures, on certain indices including the S&P 500 index, EAFE index, and NASDAQ index.

Additionally, the Company holds customized derivative contracts to provide protection from certain capital market risks for the remaining term of specified blocks of non-reinsured GMWB riders. These customized derivative contracts are based on policyholder behavior assumptions specified at the inception of the derivative contracts. The Company retains the risk for differences between assumed and actual policyholder behavior and between the performance of the actively managed funds underlying the separate accounts and their respective indices.

While the Company actively manages this dynamic hedging program, increased U.S. GAAP earnings volatility may result from factors including, but not limited to: policyholder behavior, capital markets, divergence between the performance of the underlying funds and the hedging indices, changes in hedging positions and the relative emphasis placed on various risk management objectives.

Macro Hedge Program

The Company's macro hedging program uses derivative instruments, such as options and futures on equities and interest rates, to provide protection against the statutory tail scenario risk arising from GMWB and GMDB liabilities on the Company's statutory surplus. These macro hedges cover some of the residual risks not otherwise covered by the dynamic hedging programs. Management assesses this residual risk under various scenarios in designing and executing the macro hedge program. The macro hedge program will result in additional U.S. GAAP earnings volatility as changes in the value of the macro hedge derivatives, which are designed to reduce statutory reserve and capital volatility, may not be closely aligned to changes in U.S. GAAP liabilities.

Variable Annuity Hedging Program Sensitivities

The underlying guaranteed living benefit liabilities and the related hedge assets within the GMWB (excluding life contingent GMWB payments) and Macro hedge programs are carried at fair value, with the exception of liabilities within the Macro hedge program.

The following table presents our estimates of the potential instantaneous impacts from sudden market stresses related to equity market prices, interest rates, and implied market volatilities. The following sensitivities represent: (1) the net estimated difference between the change in the fair value of GMWB liabilities and the underlying hedge instruments and (2) the estimated change in fair value of the hedge instruments for the macro program, before the impacts of amortization of DAC, and taxes. As noted in the preceding discussion, certain hedge assets are used to hedge liabilities that are not carried at fair value and will not have a liability offset in the U.S. GAAP sensitivity analysis. All sensitivities are measured as of year end and are related to the fair value of liabilities and hedge instruments in place at that date for the Company's variable annuity hedge programs. The impacts presented in the table that follows are estimated individually and measured without consideration of any correlation among market risk factors.

| GAAP Sensitivity Analysis | | As of December 31, 2015 | | | | | |
|--|----|--------------------------------|---------------|---------------|---------------|---------------|---------------|
| (before tax and DAC) [1] | | GMWB | | | Macro | | |
| | | -20 % | -10 % | 10 % | -20 % | -10 % | 10 % |
| Equity Market Return | | | | | | | |
| <i>Potential Net Fair Value Impact</i> | \$ | (19) | \$ (6) | \$ — | \$ 168 | \$ 70 | \$ (43) |
| Interest Rates | | -50bps | -25bps | +25bps | -50bps | -25bps | +25bps |
| <i>Potential Net Fair Value Impact</i> | \$ | 2 | \$ 1 | \$ (3) | \$ 12 | \$ 6 | \$ (6) |
| Implied Volatilities | | 10 % | 2 % | -10 % | 10 % | 2 % | -10 % |
| <i>Potential Net Fair Value Impact</i> | \$ | (50) | \$ (10) | \$ 48 | \$ 93 | \$ 19 | \$ (89) |

[1] These sensitivities are based on the following key market levels as of December 31, 2015: 1) S&P of 2044; 2) 10yr US swap rate of 2.25%; and 3) S&P 10yr volatility of 27.16%

The preceding sensitivity analysis is an estimate and should not be used to predict the future financial performance of the Company's variable annuity hedge programs. The actual net changes in the fair value liability and the hedging assets illustrated in the preceding table may vary materially depending on a variety of factors which include but are not limited to:

- The sensitivity analysis is only valid as of the measurement date and assumes instantaneous changes in the capital market factors and no ability to rebalance hedge positions prior to the market changes;
- Changes to the underlying hedging program, policyholder behavior, and variation in underlying fund performance relative to the hedged index, which could materially impact the liability; and
- The impact of elapsed time on liabilities or hedge assets, any non-parallel shifts in capital market factors, or correlated moves across the sensitivities.

Financial Risk on Statutory Capital

Statutory surplus amounts and RBC ratios may increase or decrease in any period depending upon a variety of factors and may be compounded in extreme scenarios or if multiple factors occur at the same time. At times the impact of changes in certain market factors or a combination of multiple factors on RBC ratios can be counterintuitive. Factors include:

- In general, as equity market levels and interest rates decline, the amount and volatility of both our actual potential obligation, as well as the related statutory surplus and capital margin for death and living benefit guarantees associated with variable annuity contracts can be materially negatively affected, sometimes at a greater than linear rate. Other market factors that can impact statutory surplus, reserve levels and capital margin include differences in performance of variable subaccounts relative to indices and/or realized equity and interest rate volatilities. In addition, as equity market levels increase, generally surplus levels will increase. RBC ratios will also tend to increase when equity markets increase. However, as a result of a number of factors and market conditions, including the level of hedging costs and other risk transfer activities, reserve requirements for death and living benefit guarantees and RBC requirements could increase with rising equity markets, resulting in lower RBC ratios. Non-market factors, which can also impact the amount and volatility of both our actual potential obligation, as well as the related statutory surplus and capital margin, include actual and estimated policyholder behavior experience as it pertains to lapsation, partial withdrawals, and mortality.
- As the value of certain fixed-income and equity securities in our investment portfolio decreases, due in part to credit spread widening, statutory surplus and RBC ratios may decrease.
- As the value of certain derivative instruments that do not get hedge accounting decreases, statutory surplus and RBC ratios may decrease.
- Our statutory surplus is also impacted by widening credit spreads as a result of the accounting for the assets and liabilities in our fixed market value adjusted ("MVA") annuities. Statutory separate account assets supporting the fixed MVA annuities are recorded at fair value. In determining the statutory reserve for the fixed MVA annuities, we are required to use current crediting rates. In many capital market scenarios, current crediting rates are highly correlated with market rates implicit in the fair value of statutory separate account assets. As a result, the change in statutory reserve from period to period will likely substantially offset the change in the fair value of the statutory separate account assets. However, in periods of volatile credit markets, actual credit spreads on investment assets may increase sharply for certain sub-sectors of the overall credit market, resulting in statutory separate account asset market value losses. As actual credit spreads are not fully reflected in the current crediting rates, the calculation of statutory reserves will not substantially offset the change in fair value of the statutory separate account assets resulting in reductions in statutory surplus. This has resulted and may continue to result in the need to devote significant additional capital to support the product.

Most of these factors are outside of the Company's control. The Company's financial strength and credit ratings are significantly influenced by its statutory surplus amounts and RBC ratios. In addition, rating agencies may implement changes to their internal models that have the effect of increasing or decreasing the amount of statutory capital we must hold in order to maintain our current ratings.

The Company has reinsured approximately 33% of its risk associated with GMWB and 74% of its risk associated with the aggregate GMDDB exposure. These reinsurance agreements serve to reduce the Company's exposure to changes in the statutory reserves and the related capital and RBC ratios associated with changes in the equity markets. The Company also continues to explore other solutions for mitigating the capital market risk effect on surplus, such as internal and external reinsurance solutions, modifications to our hedging program, changes in product design, and expense management.

Foreign Currency Exchange Risk

Foreign currency exchange risk is defined as the risk of financial loss due to changes in the relative value between currencies. The Company's foreign currency exchange risk is related to non-U.S. dollar denominated investments, which primarily consist of fixed maturity and equity investments, and a yen denominated fixed payout annuity. A significant portion of the Company's foreign currency exposure is mitigated through the use of derivatives.

Fixed Maturity and Equity Investments

The risk associated with the non-U.S. dollar denominated fixed maturities and equities relates to potential decreases in value and income resulting from unfavorable changes in foreign exchange rates. The fair values of the non-U.S. dollar denominated fixed maturities and equities at December 31, 2015 and 2014 were approximately \$ 366 and \$ 100 , respectively. Included in these amounts are \$ 6 and \$ 7 at December 31, 2015 and 2014 , respectively, related to non-U.S. dollar denominated fixed maturity and equity securities that directly support liabilities denominated in the same currencies. At December 31, 2015 and 2014 , the derivatives used to hedge currency exchange risk related to the remaining non-U.S. dollar denominated fixed maturities and equities had a total notional amount of \$ 406 and \$ 79 , respectively, and total fair value of \$ 11 and \$ 1 , respectively.

Based on the fair values of the Company's non-U.S. dollar denominated securities and derivative instruments as of December 31, 2015 and 2014, management estimates that a 10% unfavorable change in exchange rates would decrease the fair values by a before-tax total of approximately \$ 1. The estimated impact was based upon a 10% change in December 31 spot rates. The selection of the 10% unfavorable change was made only for illustration of the potential hypothetical impact of such an event and should not be construed as a prediction of future market events. Actual results could differ materially from those illustrated above due to the nature of the estimates and assumptions used in the analysis.

Liabilities

The Company has foreign currency exchange risk associated with yen denominated fixed payout annuities under a reinsurance contract. The Company has entered into pay U.S. dollar, receive yen swap contracts to hedge the currency exposure between the U.S. dollar denominated assets and the yen denominated fixed liability reinsurance payments.

The Company previously issued non-U.S. dollar denominated funding agreement liability contracts. The Company hedged the foreign currency risk associated with these liability contracts with currency rate swaps. At December 31, 2015 and 2014, the derivatives used to hedge foreign currency exchange risk related to foreign denominated liability contracts had a total notional amount of \$ 94 and a total fair value of \$ (26) and \$ (20), respectively.

Credit Risk

Credit risk is defined as the risk to earnings or capital due to uncertainty of an obligor's or counterparty's ability or willingness to meet its obligations in accordance with contractually agreed upon terms. The majority of the Company's credit risk is concentrated in its investment holdings but is also present in reinsurance and insurance portfolios. Credit risk is comprised of three major factors: the risk of change in credit quality, or credit migration risk; the risk of default; and the risk of a change in value due to changes in credit spread. A decline in creditworthiness is typically associated with an increase in an investment's credit spread, potentially resulting in an increase in other-than-temporary impairments and an increased probability of a realized loss upon sale.

The objective of the Company's enterprise credit risk management strategy is to identify, quantify, and manage credit risk on an aggregate portfolio basis and to limit potential losses in accordance with an established credit risk management policy. The Company manages to its credit risk appetite by primarily holding a diversified mix of investment grade issuers and counterparties across its investment, reinsurance, and insurance portfolios. Potential losses are also limited within portfolios by diversifying across geographic regions, asset types, and sectors.

The Company manages credit risk exposure from its inception to its maturity or sale. Both the investment and reinsurance areas have formulated and implemented policies and procedures for counterparty approvals and authorizations. Although approval processes may vary by area and type of credit risk, approval processes establish minimum levels of creditworthiness and financial stability. Credits considered for investment are subjected to prudent and conservative underwriting reviews. Within the investment portfolio, private securities are subject to committee review for approval.

Credit risks are managed on an on-going basis through the use of various processes and analyses. At the investment, reinsurance, and insurance product levels, fundamental credit analyses are performed at the issuer/counterparty level on a regular basis. To provide a holistic review within the investment portfolio, fundamental analyses are supported by credit ratings, assigned by nationally recognized rating agencies or internally assigned, and by quantitative credit analyses. The Company utilizes various risk tools, such as credit Value at Risk ("VaR") to measure spread, migration, and default risk on a monthly basis. Issuer and security level risk measures are also utilized. In the event of deterioration in credit quality, the Company maintains watch lists of problem counterparties within the investment and reinsurance portfolios. The watch lists are updated based on regular credit examinations and management reviews. The Company also performs quarterly assessments of probable expected losses in the investment portfolio. The process is conducted on a sector basis and is intended to promptly assess and identify potential problems in the portfolio and to recognize necessary impairments.

Credit risk policies at the enterprise and operation level ensure comprehensive and consistent approaches to quantifying, evaluating, and managing credit risk under expected and stressed conditions. These policies define the scope of the risk, authorities, accountabilities, terms, and limits, and are regularly reviewed and approved by senior management. Aggregate counterparty credit quality and exposure is monitored on a daily basis utilizing an enterprise-wide credit exposure information system that contains data on issuers, ratings, exposures, and credit limits. Exposures are tracked on a current and potential basis. Credit exposures are reported regularly to The Hartford's Asset Liability Committee ("ALCO") and the ERCC. Exposures are aggregated by the ultimate parent across investments, reinsurance receivables, insurance products with credit risk, and derivative counterparties.

The Company exercises various methods to mitigate its credit risk exposure within its investment and reinsurance portfolios. Some of the reasons for mitigating credit risk include financial instability or poor credit, avoidance of arbitration or litigation, future uncertainty of the counterparty, and exposure in excess of risk tolerances. Credit risk within the investment portfolio is most commonly mitigated through asset sales or the use of derivative instruments. Counterparty credit risk is mitigated through the practice of entering into contracts only with strong creditworthy institutions and through the practice of holding and posting of collateral. In addition, transactions cleared through a central clearing house reduce risk due to their ability to require daily variation margin, monitor the Company's ability to request additional collateral in the event of a counterparty downgrade, and be an independent valuation source. Systemic credit risk is mitigated through the construction of high-quality, diverse portfolios that are subject to regular underwriting of credit risks. For further discussion of the Company's investment and derivative instruments, see Investment Management section and Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements. See Reinsurance section for further discussion on managing and mitigating credit risk from the use of reinsurance via an enterprise security review process.

As of December 31, 2015, the Company had no investment exposure to any credit concentration risk of a single issuer, or counterparty greater than 10% of the Company's stockholders' equity, other than the U.S. government and certain U.S. government securities. For further discussion of concentration of credit risk in the investment portfolio, see the Concentration of Credit Risk section in Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements.

Derivative Instruments

The Company utilizes a variety of OTC, OTC-cleared and exchange-traded derivative instruments as a part of its overall risk management strategy, as well as to enter into replication transactions. Derivative instruments are used to manage risk associated with interest rate, equity market, commodity market, credit spread, issuer default, price, and currency exchange rate risk or volatility. Replication transactions are used as an economical means to synthetically replicate the characteristics and performance of assets that are permissible investments under the Company's investment policies. For further information on the Company's use of derivatives, see Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements.

Derivative activities are monitored and evaluated by the Company's compliance and risk management teams and reviewed by senior management. In addition, the Company monitors counterparty credit exposure on a monthly basis to ensure compliance with Company policies and statutory limitations. The notional amounts of derivative contracts represent the basis upon which pay or receive amounts are calculated and are not reflective of credit risk. Downgrades to the credit ratings of The Hartford's insurance operating companies may have adverse implications for its use of derivatives including those used to hedge benefit guarantees of variable annuities. In some cases, downgrades may give derivative counterparties for OTC derivatives and clearing brokers for OTC-cleared derivatives the right to cancel and settle outstanding derivative trades or require additional collateral to be posted. In addition, downgrades may result in counterparties and clearing brokers becoming unwilling to engage in or clear additional derivatives or may require collateralization before entering into any new trades. This would restrict the supply of derivative instruments commonly used to hedge variable annuity guarantees, particularly long-dated equity derivatives and interest rate swaps.

The Company uses various derivative counterparties in executing its derivative transactions. The use of counterparties creates credit risk that the counterparty may not perform in accordance with the terms of the derivative transaction. The Company has derivative counterparty exposure policies which limit the Company's exposure to credit risk. The Company's policies with respect to derivative counterparty exposure establishes market-based credit limits, favors long-term financial stability and creditworthiness of the counterparty and typically requires credit enhancement/credit risk reducing agreements. The Company minimizes the credit risk of derivative instruments by entering into transactions with high quality counterparties primarily rated A or better, which are monitored and evaluated by the Company's risk management team and reviewed by senior management. The Company also generally requires that OTC derivative contracts be governed by an International Swaps and Derivatives Association ("ISDA") Master Agreement, which is structured by legal entity and by counterparty and permits right of offset.

The Company has developed credit exposure thresholds which are based upon counterparty ratings. Credit exposures are measured using the market value of the derivatives, resulting in amounts owed to the Company by its counterparties or potential payment obligations from the Company to its counterparties. The Company enters into credit support annexes in conjunction with the ISDA agreements, which require daily collateral settlement based upon agreed upon thresholds. For purposes of daily derivative collateral maintenance, credit exposures are generally quantified based on the prior business day's market value and collateral is pledged to and held by, or on behalf of, the Company to the extent the current value of the derivatives exceed the contractual thresholds. In accordance with industry standard and the contractual agreements, collateral is typically settled on the next business day. The Company has exposure to credit risk for amounts below the exposure thresholds which are uncollateralized, as well as for market fluctuations that may occur between contractual settlement periods of collateral movements.

For the company's derivative programs, the maximum uncollateralized threshold for a derivative counterparty for a single legal entity is \$ 10 . The Company currently transacts OTC derivatives in two legal entities that have a threshold greater than zero; therefore, the maximum combined threshold for a single counterparty across all legal entities that use derivatives is \$ 20 . In addition, the Company may have exposure to multiple counterparties in a single corporate family due to a common credit support provider. As of December 31, 2015 , the maximum combined threshold for all counterparties under a single credit support provider across all legal entities that use derivatives was \$ 40 . Based on the contractual terms of the collateral agreements, these thresholds may be immediately reduced due to a downgrade in either party's credit rating. For further discussion, see the Derivative Commitments section of Note 9 - Commitments and Contingencies of Notes to Consolidated Financial Statements.

For the year ended December 31, 2015 the Company incurred no losses on derivative instruments due to counterparty default.

In addition to counterparty credit risk, the Company may also introduce credit risk through the use of credit default swaps that are entered into to manage credit exposure. Credit default swaps involve a transfer of credit risk of one or many referenced entities from one party to another in exchange for periodic payments. The party that purchases credit protection will make periodic payments based on an agreed upon rate and notional amount, and for certain transactions there will also be an upfront premium payment. The second party, who assumes credit risk, will typically only make a payment if there is a credit event as defined in the contract and such payment will typically be equal to the notional value of the swap contract less the value of the referenced security issuer's debt obligation. A credit event is generally defined as default on contractually obligated interest or principal payments or bankruptcy of the referenced entity.

The Company uses credit derivatives to purchase credit protection and to assume credit risk with respect to a single entity, referenced index, or asset pool. The Company purchases credit protection through credit default swaps to economically hedge and manage credit risk of certain fixed maturity investments across multiple sectors of the investment portfolio. The Company also enters into credit default swaps that assume credit risk as part of replication transactions. Replication transactions are used as an economical means to synthetically replicate the characteristics and performance of assets that are permissible investments under the Company's investment policies. These swaps reference investment grade single corporate issuers and baskets, which include customized diversified portfolios of corporate issuers, which are established within sector concentration limits and may be divided into tranches which possess different credit ratings.

As of December 31, 2015 and 2014 , the notional amount related to credit derivatives that purchase credit protection was \$ 249 and \$ 276 , respectively, while the fair value was \$ 10 and \$ (1) . As of December 31, 2015 and 2014 , the notional amount related to credit derivatives that assume credit risk was \$ 1.4 billion and \$ 946 , respectively, while the fair value was \$ (10) and \$ 7 , respectively. For further information on credit derivatives, see Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements.

Investment Portfolio Risks and Risk Management

Investment Portfolio Composition

The following table presents the Company's fixed maturities, AFS, by credit quality. The following average credit ratings referenced throughout this section are based on availability, and are the midpoint of the applicable ratings among Moody's, S&P, Fitch and Morningstar. If no rating is available from a rating agency, then an internally developed rating is used.

Fixed Maturities by Credit Quality

| | December 31, 2015 | | | December 31, 2014 | | |
|--|-------------------|------------------|-----------------------------|-------------------|------------------|-----------------------------|
| | Amortized Cost | Fair Value | Percent of Total Fair Value | Amortized Cost | Fair Value | Percent of Total Fair Value |
| United States Government/Government agencies | \$ 3,263 | \$ 3,476 | 14.1% | \$ 3,068 | \$ 3,393 | 13.3% |
| AAA | 1,849 | 1,894 | 7.7% | 2,034 | 2,115 | 8.3% |
| AA | 2,492 | 2,612 | 10.6% | 2,077 | 2,240 | 8.8% |
| A | 7,180 | 7,668 | 31.1% | 7,484 | 8,412 | 33.2% |
| BBB | 7,248 | 7,479 | 30.3% | 7,042 | 7,641 | 30.0% |
| BB & below | 1,527 | 1,528 | 6.2% | 1,555 | 1,635 | 6.4% |
| Total fixed maturities, AFS | \$ 23,559 | \$ 24,657 | 100% | \$ 23,260 | \$ 25,436 | 100% |

The increase in the "AA" category was largely due to purchases of CLOs and corporate securities within the financial services sector. The decline in the "A" category and the increase in the "BBB" is primarily due to downgrades of corporate securities and bonds of municipalities and political subdivisions bonds ("municipal bonds") from "A" to "BBB", as well as net purchases within the "BBB" category. The value of securities in the "United States Government/ Government agencies" category increased, as compared to December 31, 2014, primarily due to purchases of U.S. treasuries as a result of portfolio management between sectors to manage credit, duration and liquidity needs, as well as holding additional securities related to our repurchase agreement program. Fixed maturities, FVO, are not included in the preceding table. For further discussion on FVO securities, see Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

The following table presents the Company's AFS securities by type, as well as fixed maturities and equity, FVO.

| Securities by Type | | | | | | | | | | |
|---|------------------------|------------------------|-------------------------|------------------|-----------------------------|------------------------|------------------------|-------------------------|------------------|-----------------------------|
| | December 31, 2015 | | | | | December 31, 2014 | | | | |
| | Cost or Amortized Cost | Gross Unrealized Gains | Gross Unrealized losses | Fair Value | Percent of Total Fair Value | Cost or Amortized Cost | Gross Unrealized Gains | Gross Unrealized losses | Fair Value | Percent of Total Fair Value |
| ABS | | | | | | | | | | |
| Consumer loans | 667 | 2 | (30) | 639 | 2.6% | 916 | 4 | (24) | 896 | 3.5% |
| Small business | 105 | 11 | (4) | 112 | 0.5% | 133 | 11 | (6) | 138 | 0.5% |
| Other | 92 | 3 | — | 95 | 0.4% | 132 | 5 | — | 137 | 0.5% |
| Collateralized debt obligations ("CDOs") | | | | | | | | | | |
| Collateralized loan obligations ("CLOs") | 1,085 | 2 | (10) | 1,077 | 4.3% | 800 | 1 | (7) | 794 | 3.1% |
| Commercial real estate ("CREs") | 85 | 35 | (1) | 119 | 0.5% | 100 | 76 | (9) | 167 | 0.7% |
| Other [1] | 184 | 30 | — | 212 | 0.8% | 183 | 7 | (4) | 187 | 0.7% |
| Commercial mortgage-backed securities ("CMBS") | | | | | | | | | | |
| Agency backed [2] | 362 | 12 | (2) | 372 | 1.5% | 305 | 15 | — | 320 | 1.3% |
| Bonds | 1,304 | 33 | (14) | 1,323 | 5.4% | 1,259 | 68 | (2) | 1,325 | 5.2% |
| Interest only ("IOs") | 270 | 7 | (8) | 269 | 1.1% | 233 | 14 | (5) | 242 | 1.0% |
| Corporate | | | | | | | | | | |
| Basic industry | 640 | 38 | (24) | 654 | 2.7% | 896 | 69 | (7) | 958 | 3.8% |
| Capital goods | 1,014 | 77 | (10) | 1,081 | 4.4% | 1,087 | 132 | (2) | 1,217 | 4.8% |
| Consumer cyclical | 963 | 54 | (13) | 1,004 | 4.0% | 887 | 86 | (4) | 969 | 3.8% |
| Consumer non-cyclical | 2,233 | 146 | (15) | 2,364 | 9.6% | 2,037 | 239 | (3) | 2,273 | 8.9% |
| Energy | 1,447 | 61 | (71) | 1,437 | 5.8% | 1,807 | 189 | (27) | 1,969 | 7.7% |
| Financial services | 3,184 | 187 | (34) | 3,337 | 13.5% | 2,691 | 298 | (50) | 2,939 | 11.6% |
| Tech./comm. | 1,914 | 163 | (30) | 2,047 | 8.3% | 1,656 | 248 | (6) | 1,898 | 7.5% |
| Transportation | 531 | 33 | (5) | 559 | 2.3% | 562 | 60 | (1) | 621 | 2.4% |
| Utilities | 2,419 | 206 | (22) | 2,603 | 10.6% | 2,461 | 351 | (9) | 2,803 | 11.0% |
| Other | 80 | 10 | (1) | 89 | 0.4% | 82 | 13 | — | 95 | 0.4% |
| Foreign govt./govt. agencies | 328 | 14 | (11) | 331 | 1.3% | 576 | 35 | (9) | 602 | 2.4% |
| Municipal taxable | | | | | | | | | | |
| Taxable | 1,056 | 80 | (5) | 1,131 | 4.6% | 928 | 118 | (1) | 1,045 | 4.1% |
| Tax-exempt | 1 | — | — | 1 | — | 7 | — | — | 7 | — |
| RMBS | | | | | | | | | | |
| Agency | 774 | 32 | — | 806 | 3.3% | 1,046 | 50 | — | 1,096 | 4.3% |
| Non-agency | 38 | 1 | — | 39 | 0.2% | 21 | 1 | — | 22 | 0.1% |
| Alt-A | 27 | 1 | — | 30 | 0.1% | 33 | — | — | 33 | 0.1% |
| Sub-prime | 629 | 9 | (8) | 628 | 2.5% | 705 | 13 | (12) | 706 | 2.8% |
| U.S. Treasuries | 2,127 | 184 | (13) | 2,298 | 9.3% | 1,717 | 261 | (1) | 1,977 | 7.8% |
| Fixed maturities, AFS | 23,559 | 1,431 | (331) | 24,657 | 100% | 23,260 | 2,364 | (189) | 25,436 | 100% |
| Equity securities | | | | | | | | | | |
| Financial services | 58 | 1 | — | 59 | 33.1% | 66 | 5 | — | 71 | 26.7% |
| Other | 120 | 10 | (11) | 119 | 66.9% | 209 | 5 | (19) | 195 | 73.3% |
| Equity securities, AFS | 178 | 11 | (11) | 178 | 100% | 275 | 10 | (19) | 266 | 100% |
| Total AFS securities | \$ 23,737 | \$ 1,442 | \$ (342) | \$ 24,835 | | \$ 23,535 | \$ 2,374 | \$ (208) | \$ 25,702 | |
| Fixed maturities, FVO | | | | \$ 165 | | | | | \$ 280 | |
| Equity securities, FVO [3] | | | | \$ 281 | | | | | \$ 248 | |

[1] Gross unrealized gains (losses) exclude the fair value of bifurcated embedded derivatives within certain securities. Changes in value are recorded in net realized capital gains (losses).

[2] Includes securities with pools of loans issued by the Small Business Administration which are backed by the full faith and credit of the U.S. government.

[3] Included in equity securities, AFS on the Consolidated Balance Sheets.

The decline in the fair value of AFS securities as compared to December 31, 2014 is primarily attributable to widening credit spreads and an increase in interest rates, partially offset by the reinvestment of short-term assets into fixed maturities, as well as the purchase of U.S. Treasuries with the proceeds received from repurchase agreements. During 2015, the Company increased its investment in the financial services sector through purchases of primarily investment grade corporate securities while reducing its exposure to the energy sector as a result of the continued volatility in oil prices. These changes are discussed further below. The decline in the fair value of FVO securities was largely due to the redemption of two consolidated investment funds in which the Company had controlling financial interests. The Company classified the underlying fixed maturities held in these consolidated investment funds within the Fixed Maturities, FVO line on the Consolidated Balance Sheets. For further discussion on FVO securities, see Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

Energy Exposure

Market values of securities in the energy sector have continued to experience volatility throughout 2015. The continued price volatility has caused credit spreads to widen for corporate and sovereign issuers that generate a large portion of their revenues from energy. The impact is more pronounced on issuers with below investment grade credit. Ultimately, the impact on these issuers will be determined by the severity and duration of the decline in prices and the ability of the issuers to hedge price declines, adjust their cost structure or find other sources of revenue.

The Company's direct exposure within its investment portfolio to the energy sector totals approximately 5% of total invested assets as of December 31, 2015 and is primarily comprised of corporate debt. As a result of continued volatility in prices, the Company reduced its exposure to the energy sector during 2015 by \$455. The Company's energy sector investments as of December 31, 2015 are primarily comprised of investment grade securities and the exposure is diversified by issuer, as well as in different sub-sectors of the energy market. The following table summarizes the Company's exposure to the energy sector by security type and credit quality.

| | December 31, 2015 | | December 31, 2014 | |
|--|------------------------|-----------------|------------------------|-----------------|
| | Cost or Amortized Cost | Fair Value | Cost or Amortized Cost | Fair Value |
| Corporate and equity securities, AFS | | | | |
| Investment grade corporate | \$ 1,345 | \$ 1,354 | \$ 1,700 | \$ 1,872 |
| Below investment grade corporate | 102 | 83 | 107 | 97 |
| Equity, AFS | 3 | 2 | 5 | 5 |
| Total corporate and equity securities, AFS | 1,450 | 1,439 | 1,812 | 1,974 |
| Foreign govt./govt. agencies, AFS | | | | |
| Investment grade | 119 | 130 | 169 | 182 |
| Below investment grade | 2 | 1 | 13 | 12 |
| Total foreign govt./govt. agencies, AFS [1] | 121 | 131 | 182 | 194 |
| Fixed maturities, FVO | | | | |
| Investment grade | 1 | 1 | 2 | 2 |
| Below investment grade | 1 | 1 | 13 | 13 |
| Total fixed maturities, FVO | 2 | 2 | 15 | 15 |
| Short-term investments | — | — | 19 | 19 |
| Total energy exposure [2] | \$ 1,573 | \$ 1,572 | \$ 2,028 | \$ 2,202 |

[1] Includes sovereigns for which oil exports are greater than 4% of gross domestic product.

[2] Included in fixed maturities, AFS and FVO, equity, AFS and short-term investments on the Consolidated Balance Sheets. Excludes equity securities, FVO with cost and fair value of \$39 and \$39, respectively, as of December 31, 2014, that are hedged with total return swaps. The Company did not hold any equity securities, FVO within the energy sector as of December 31, 2015.

The Company manages the credit risk associated with the energy sector within the investment portfolio on an on-going basis using macroeconomic analysis and issuer credit analysis. The Company considers alternate scenarios including oil prices remaining at low levels for an extended period and/or declining significantly below current levels. For additional details regarding the Company's management of credit risks, see the Credit Risk Section of this MD&A. The Company has evaluated all available-for-sale securities for potential other-than-temporary impairments as of December 31, 2015 and 2014, and concluded that for the securities in an unrealized loss position, it is more likely than not that we will recover our entire amortized cost basis in the securities. In addition, the Company does not currently have the intent-to-sell, nor will we be required to sell, the securities discussed above. For additional details regarding the Company's impairment process, see the Other-Than-Temporary Impairments Section of this MD&A.

Emerging Market Exposure

Emerging market securities have been negatively impacted by growing concerns surrounding the growth of the Chinese economy, volatile prices for energy and other commodities, political tension in eastern Europe, softer-than-expected global economic growth, as well as trade and budget deficits, raising the potential for destabilizing capital outflows and rapid currency depreciation. As a result of these factors, credit spreads for certain emerging market securities have been volatile and we expect continued sensitivity to geopolitical events, the ongoing evolution of Fed policy and other economic factors, including contagion risk.

The Company has limited direct exposure within its investment portfolio to emerging market issuers, totaling \$333 and \$318 in amortized cost and fair value, respectively, or approximately 1% of total invested assets as of December 31, 2015, and is primarily comprised of sovereign and corporate debt issued in U.S. dollars. The Company identifies exposures with the issuers' ultimate parent country of domicile, which may not be the country of the security issuer. The following table presents the Company's exposure to securities within certain emerging markets currently under the greatest stress, defined as countries that had a sovereign S&P credit rating of B- or below, or countries that have had a current account deficit and have an average inflation level greater than 5% for the past six months, as of either December 31, 2015 or 2014.

| | December 31, 2015 | | December 31, 2014 | |
|------------------|-------------------|---------------|-------------------|---------------|
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| Brazil | \$ 28 | \$ 24 | \$ 55 | \$ 55 |
| India | 11 | 11 | 28 | 28 |
| Indonesia | 17 | 16 | 34 | 34 |
| Kazakhstan | 12 | 12 | 32 | 30 |
| Lebanon | — | — | 11 | 12 |
| South Africa | 5 | 5 | 23 | 23 |
| Turkey | 13 | 13 | 27 | 28 |
| Uruguay | 5 | 5 | 7 | 7 |
| Other | 30 | 31 | 54 | 54 |
| Total [1] | \$ 121 | \$ 117 | \$ 271 | \$ 271 |

[1] Includes an amortized cost and fair value of \$53 and \$44, respectively, as of December 31, 2015 and an amortized cost and fair value of \$63 and \$62, respectively, as of December 31, 2014 included in the exposure to the energy sector table above.

The Company manages the credit risk associated with emerging market securities within the investment portfolio on an on-going basis using macroeconomic analysis and issuer credit analysis subject to diversification and individual credit risk management limits. For additional details regarding the Company's management of credit risk, see the Credit Risk section of this MD&A.

Due to the continued decline in oil prices, during 2015 the Company significantly reduced its exposure to countries that rely on the energy sector as a main source of their Gross Domestic Product ("GDP"), such as Brazil.

European Exposure

In recent years, certain economies in the European region have experienced adverse economic conditions, specifically in Europe's peripheral region (Greece, Ireland, Italy, Portugal and Spain), that were precipitated in part by elevated unemployment rates weighing on inflation rates, government debt levels and the slowing growth of the region. However, austerity measures aimed at reducing sovereign debt levels and greater support from the European Central Bank's have reduced the risk of default on the sovereign debt of the countries within the region. As a result, economic conditions in the region have shown signs of improvement through stabilized credit ratings in Ireland, Italy, Portugal and Spain. Though economic conditions in the region have improved, continued slow GDP growth and elevated unemployment levels may continue to put pressure on sovereign debt.

The Company manages the credit risk associated with the European securities within the investment portfolio on an on-going basis using several processes which are supported by macroeconomic analysis and issuer credit analysis. For additional details regarding the Company's management of credit risk, see the Credit Risk section of this MD&A. The Company periodically considers alternate scenarios, including a base-case and both positive and negative "tail" scenarios that includes a partial or full break-up of the Eurozone. The outlook for key factors is evaluated, including the economic prospects for key countries, the potential for the spread of sovereign debt contagion, and the likelihood that policymakers and politicians pursue sufficient fiscal discipline and introduce appropriate backstops. Given the inherent uncertainty in the outcome of developments in the Eurozone, however, the Company controls both absolute levels of exposure and the composition of that exposure for investments and derivatives.

The Company has limited direct European exposure, totaling approximately 7% of total invested assets as of December 31, 2015. The following tables present the Company's European securities included in the Securities by Type table above. The Company identifies exposures with the issuers' ultimate parent country of domicile, which may not be the country of the security issuer.

The following tables present the Company's European securities included in the Securities by Type table above.

| | December 31, 2015 | | | | | | | |
|--|---|------------|---------------------------------------|------------|----------------------------------|------------|-------------------|------------|
| | Corporate & Equity, AFS Non-Finan. [1] | | Corporate & Equity, AFS Financials | | Foreign Govt./ Govt. Agencies | | Total | |
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| Total Europe [2] | \$ 1,411 | \$ 1,519 | \$ 583 | \$ 614 | \$ 85 | \$ 88 | \$ 2,079 | \$ 2,221 |
| Europe exposure net of credit default swap protection | | | | | | | \$ 2,079 | \$ 2,221 |

| | December 31, 2014 | | | | | | | |
|--|---|-----------------|---------------------------------------|---------------|----------------------------------|---------------|-----------------|-----------------|
| | Corporate & Equity, AFS Non-Finan. [1] | | Corporate & Equity, AFS Financials | | Foreign Govt./ Govt. Agencies | | Total | |
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| Spain [3] | \$ 20 | \$ 22 | \$ — | \$ — | \$ — | \$ — | \$ 20 | \$ 22 |
| Ireland | 25 | 29 | — | — | — | — | 25 | 29 |
| Peripheral region | 45 | 51 | — | — | — | — | 45 | 51 |
| Europe excluding peripheral region [5] | 1,467 | 1,641 | 472 | 529 | 139 | 149 | 2,078 | 2,319 |
| Total Europe | \$ 1,512 | \$ 1,692 | \$ 472 | \$ 529 | \$ 139 | \$ 149 | \$ 2,123 | \$ 2,370 |
| Europe exposure net of credit default swap protection [4] | | | | | | | \$ 2,119 | \$ 2,370 |

[1] Includes amortized cost and fair value of \$1 and \$2 as of December 31, 2015 and 2014, respectively, related to limited partnerships and other alternative investments.

[2] As of December 31, 2015, the Company did not hold any investments in the peripheral region.

[3] As of December 31, 2014, the Company had credit default swap protection with a notional amount of \$3 related to Corporate and Equity, AFS, respectively.

[4] Includes a notional amount and fair value of \$4 and \$0, respectively, as of December 31, 2014 related to credit default swap protection. There was no credit default swap protection as of December 31, 2015.

[5] Includes an amortized cost and fair value of \$186 and \$194, respectively, as of December 31, 2015 and an amortized cost and a fair value of \$172 and \$188, respectively, as of December 31, 2014 included in the exposure to the energy sector table above.

The Company's European investment exposure largely relates to corporate entities which are domiciled in or generated a significant portion of its revenue within the United Kingdom, the Netherlands, Germany and Switzerland. Entities domiciled in the United Kingdom comprise the Company's largest exposure; as of December 31, 2015 and 2014, the U.K. exposure totals less than 4% of total invested assets. The majority of the European investments are U.S. dollar-denominated, and those securities that are pound and euro-denominated are hedged to U.S. dollars or support foreign-denominated liabilities. For a discussion of foreign currency risks, see the Foreign Currency Exchange Risk section of this MD&A. The Company does not hold any sovereign exposure to the peripheral region and does not hold any exposure to issuers in Greece. As of both December 31, 2015 and 2014, the Company's unfunded commitments associated with its investment portfolio was immaterial, and the weighted average credit quality of European investments was A-.

As of December 31, 2014, the Company's credit default swaps that provide credit protection on European issuers had a notional amount of \$4 and a fair value of \$0. As of December 31, 2014, credit default swaps related to the peripheral region that reference single name corporate European issuers had a notional value \$3. As of December 31, 2015, the Company did not hold any credit default swaps that provide credit protection on European issuers. The maturity dates of the credit default swaps are primarily consistent with the hedged bonds. For further information on the use of the Company's credit derivatives and counterparty credit quality, see Derivative Instruments within the Credit Risk section in this MD&A.

Financial Services

The Company's exposure to the financial services sector is predominantly through investment grade banking and insurance institutions. The following table presents the Company's fixed maturity, AFS and equity, AFS securities in the financial services sector that are included in the Securities by Type table above.

| | December 31, 2015 | | | December 31, 2014 | | |
|------------------|-------------------|-----------------|----------------------------|-------------------|-----------------|----------------------------|
| | Amortized Cost | Fair Value | Net Unrealized Gain/(Loss) | Amortized Cost | Fair Value | Net Unrealized Gain/(Loss) |
| AAA | \$ 18 | \$ 18 | \$ — | \$ 15 | \$ 16 | \$ 1 |
| AA | 313 | 326 | 13 | 212 | 238 | 26 |
| A | 1,616 | 1,703 | 87 | 1,448 | 1,598 | 150 |
| BBB | 1,078 | 1,123 | 45 | 899 | 945 | 46 |
| BB & below | 217 | 226 | 9 | 183 | 213 | 30 |
| Total [1] | \$ 3,242 | \$ 3,396 | \$ 154 | \$ 2,757 | \$ 3,010 | \$ 253 |

[1] Includes equity, AFS securities with an amortized cost and fair value of \$58 and \$59, respectively as of December 31, 2015 and an amortized cost and fair value of \$66 and \$71, respectively, as of December 31, 2014 included in the AFS by type table above.

The Company's investment in the financial services sector increased, as compared to December 31, 2014, due to purchases of primarily investment grade corporate securities, partially offset by a decrease in valuations as a result of increasing rates and wider credit spreads.

Commercial Real Estate

Through December 31, 2015, commercial real estate market conditions, including property prices, occupancies, financial conditions, transaction volume, and delinquencies, continued to improve. In addition, the availability of credit has increased and there is now less concern about the ability of borrowers to refinance as loans come due.

The following table presents the Company's exposure to CMBS bonds by current credit quality and vintage year included in the preceding Securities by Type table. Credit protection represents the current weighted average percentage of the outstanding capital structure subordinated to the Company's investment holding that is available to absorb losses before the security incurs the first dollar loss of principal and excludes any equity interest or property value in excess of outstanding debt.

CMBS – Bonds [1]

| December 31, 2015 | | | | | | | | | | | | | |
|--------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|--------------|-----------------|-----------------|--|
| | AAA | | AA | | A | | BBB | | BB and Below | | Total | | |
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | |
| 2004 & Prior | \$ 9 | \$ 9 | \$ 39 | \$ 44 | \$ — | \$ — | \$ — | \$ — | \$ 1 | \$ 2 | \$ 49 | \$ 55 | |
| 2005 | 63 | 72 | 5 | 5 | — | — | 5 | 5 | — | — | 73 | 82 | |
| 2006 | 99 | 100 | 59 | 60 | 89 | 90 | 60 | 61 | 18 | 18 | 325 | 329 | |
| 2007 | 130 | 131 | 80 | 82 | 45 | 46 | 7 | 7 | 16 | 17 | 278 | 283 | |
| 2008 | 15 | 16 | — | — | — | — | — | — | — | — | 15 | 16 | |
| 2009 | 9 | 9 | — | — | — | — | — | — | — | — | 9 | 9 | |
| 2010 | — | — | 8 | 8 | — | — | — | — | — | — | 8 | 8 | |
| 2011 | 14 | 15 | — | — | — | — | 5 | 5 | — | — | 19 | 20 | |
| 2012 | 22 | 22 | — | — | 18 | 18 | 24 | 23 | — | — | 64 | 63 | |
| 2013 | 16 | 16 | 84 | 86 | 57 | 58 | 9 | 9 | — | — | 166 | 169 | |
| 2014 | 16 | 17 | 26 | 26 | 28 | 28 | 6 | 6 | 1 | 1 | 77 | 78 | |
| 2015 | 107 | 102 | 62 | 60 | 39 | 37 | 13 | 12 | — | — | 221 | 211 | |
| Total | \$ 500 | \$ 509 | \$ 363 | \$ 371 | \$ 276 | \$ 277 | \$ 129 | \$ 128 | \$ 36 | \$ 38 | \$ 1,304 | \$ 1,323 | |
| Credit protection | 34.2% | | 24.8% | | 19.5% | | 16.7% | | 12.4% | | 26.1% | | |

| December 31, 2014 | | | | | | | | | | | | | |
|--------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|--------------|-----------------|-----------------|--|
| | AAA | | AA | | A | | BBB | | BB and Below | | Total | | |
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | |
| 2004 & Prior | \$ 2 | \$ 2 | \$ 49 | \$ 56 | \$ — | \$ — | \$ — | \$ — | \$ 10 | \$ 12 | \$ 61 | \$ 70 | |
| 2005 | 80 | 92 | 30 | 31 | 23 | 23 | 27 | 27 | 13 | 13 | 173 | 186 | |
| 2006 | 173 | 181 | 53 | 56 | 81 | 85 | 62 | 65 | 18 | 18 | 387 | 405 | |
| 2007 | 143 | 149 | 79 | 83 | 46 | 48 | 21 | 21 | 23 | 24 | 312 | 325 | |
| 2008 | 17 | 18 | — | — | — | — | — | — | — | — | 17 | 18 | |
| 2009 | 9 | 9 | — | — | — | — | — | — | — | — | 9 | 9 | |
| 2010 | — | — | — | — | — | — | — | — | — | — | — | — | |
| 2011 | 14 | 15 | — | — | — | — | 5 | 6 | — | — | 19 | 21 | |
| 2012 | 22 | 22 | — | — | 13 | 13 | 6 | 6 | — | — | 41 | 41 | |
| 2013 | 16 | 16 | 85 | 88 | 54 | 57 | 11 | 13 | — | — | 166 | 174 | |
| 2014 | 20 | 21 | 32 | 32 | 22 | 23 | — | — | — | — | 74 | 76 | |
| Total | \$ 496 | \$ 525 | \$ 328 | \$ 346 | \$ 239 | \$ 249 | \$ 132 | \$ 138 | \$ 64 | \$ 67 | \$ 1,259 | \$ 1,325 | |
| Credit protection | 33.9% | | 26.1% | | 20.7% | | 22.2% | | 16.1% | | 27.2% | | |

[1] The vintage year represents the year the pool of loans was originated.

The Company also has exposure to CRE CDOs with an amortized cost and fair value of \$85 and \$119 , respectively, as of December 31, 2015 , and \$100 and \$167 , respectively, as of December 31, 2014 . These securities are comprised of pools of commercial mortgage loans or equity positions of other CMBS securitizations. We continue to monitor these investments as economic and market uncertainties regarding future performance impact market liquidity and security premiums.

In addition to CMBS bonds and CRE CDOs, the Company has exposure to commercial mortgage loans as presented in the following table. These loans are collateralized by a variety of commercial properties and are diversified both geographically throughout the United States and by property type. These loans are primarily in the form of whole loans, where the Company is the sole lender, but may include participations. Loan participations are loans where the Company has purchased or retained a portion of an outstanding loan or package of loans and participates on a pro-rata basis in collecting interest and principal pursuant to the terms of the participation agreement. As of December 31, 2015 , loans within the Company’s mortgage loan portfolio that have had extensions or restructurings other than what is allowable under the original terms of the contract are immaterial.

Commercial Mortgage Loans

| | December 31, 2015 | | | December 31, 2014 | | |
|-----------------------|--------------------|---------------------|-----------------|--------------------|---------------------|-----------------|
| | Amortized Cost [1] | Valuation Allowance | Carrying Value | Amortized Cost [1] | Valuation Allowance | Carrying Value |
| Agricultural | \$ 19 | \$ (3) | \$ 16 | \$ 25 | \$ (3) | \$ 22 |
| Whole loans | 2,797 | (16) | 2,781 | 2,964 | (12) | 2,952 |
| A-Note participations | 121 | — | 121 | 135 | — | 135 |
| Total | \$ 2,937 | \$ (19) | \$ 2,918 | \$ 3,124 | \$ (15) | \$ 3,109 |

[1] Amortized cost represents carrying value prior to valuation allowances, if any.

During 2015 , the Company funded \$275 of commercial whole loans with a weighted average loan-to-value (“LTV”) ratio of 64% and a weighted average yield of 3.8% . The Company continues to originate commercial whole loans within primary markets, such as office, industrial and multi-family, focusing on loans with strong LTV ratios and high quality property collateral. There were no mortgage loans held for sale as of December 31, 2015 or December 31, 2014 .

Valuation Allowances on Mortgage Loans

Year ended December 31, 2015

For the year ended December 31, 2015 , the change in valuation allowances on mortgage loan additions of \$4 was largely driven by individual property performance. Continued improvement in commercial real estate property valuations will positively impact future loss development, with future impairments driven by idiosyncratic loan-specific performance rather than overall deteriorating market fundamentals.

Year ended December 31, 2014

For the year ended December 31, 2014 , the change in valuation allowances on mortgage loan additions of \$4 was largely driven by individual property performance.

Municipal Bonds

The following table summarizes the amortized cost, fair value, and weighted average credit quality of the Company's available-for-sale investments in municipal bonds.

| | December 31, 2015 | | | December 31, 2014 | | |
|------------------------|-------------------|-----------------|---------------------------------|-------------------|-----------------|---------------------------------|
| | Amortized Cost | Fair Value | Weighted Average Credit Quality | Amortized Cost | Fair Value | Weighted Average Credit Quality |
| General Obligation | \$ 234 | \$ 255 | AA- | \$ 225 | \$ 256 | A+ |
| Pre-Refunded [1] | 10 | 10 | AAA | 10 | 10 | AAA |
| Revenue | | | | | | |
| Transportation | 203 | 213 | A | 138 | 153 | A |
| Health Care | 42 | 43 | AA | 48 | 52 | AA- |
| Water & Sewer | 31 | 31 | AA | 20 | 21 | AA |
| Education | 126 | 140 | AA | 104 | 122 | AA |
| Sales Tax | 66 | 70 | AA- | 67 | 77 | AA- |
| Leasing [2] | 91 | 101 | A+ | 91 | 103 | A+ |
| Power | 144 | 148 | A | 110 | 123 | A |
| Housing | 29 | 31 | AA | 29 | 32 | AA |
| Other | 81 | 90 | A | 93 | 103 | A |
| Total Revenue | 813 | 867 | A+ | 700 | 786 | A+ |
| Total Municipal | \$ 1,057 | \$ 1,132 | AA- | \$ 935 | \$ 1,052 | AA- |

[1] Pre-Refunded bonds are bonds for which an irrevocable trust containing sufficient U.S. treasury, agency, or other securities has been established to fund the remaining payments of principal and interest.

[2] Leasing revenue bonds are generally the obligations of a financing authority established by the municipality that leases facilities back to a municipality. The notes are typically secured by lease payments made by the municipality that is leasing the facilities financed by the issue. Lease payments may be subject to annual appropriation by the municipality or the municipality may be obligated to appropriate general tax revenues to make lease payments.

As of December 31, 2015, the largest issuer concentrations were the state of California, the Oregon School Boards Association, and Ohio American Municipal Power, Inc., which each comprised less than 6% of the municipal bond portfolio and were comprised of general obligation and revenue bonds. As of December 31, 2014, the largest issuer concentrations were the states of Illinois and California, as well as the Commonwealth of Massachusetts, which each comprised less than 3% of the municipal bond portfolio, and were primarily comprised of general obligation and taxable bonds.

Limited Partnerships and Other Alternative Investments

The following table presents the Company's investments in limited partnerships and other alternative investments which include hedge funds, real estate funds, and private equity and other funds. Hedge funds are comprised of approximately half credit and equity-related funds and approximately half global macro and market neutral focus funds. Real estate funds consist of investments primarily in real estate equity funds, including some funds with public market exposure, and real estate joint ventures. Private equity and other funds primarily consist of investments in funds whose assets typically consist of a diversified pool of investments in small to mid-sized non-public businesses with high growth potential as well as limited exposure to public markets.

| | December 31, 2015 | | December 31, 2014 | |
|--------------------------------|-------------------|---------------|-------------------|---------------|
| | Amount | Percent | Amount | Percent |
| Hedge funds | \$ 425 | 35.0% | \$ 512 | 39.1% |
| Real estate funds | 157 | 12.9% | 187 | 14.3% |
| Private equity and other funds | 634 | 52.1% | 610 | 46.6% |
| Total | \$ 1,216 | 100.0% | \$ 1,309 | 100.0% |

Available-for-Sale Securities — Unrealized Loss Aging

Total gross unrealized losses were \$342 as of December 31, 2015, and have increased \$134, or 64%, from December 31, 2014, due to wider credit spreads and higher interest rates. As of December 31, 2015, \$281 of the gross unrealized losses were associated with securities depressed less than 20% of cost or amortized cost. The remaining \$61 of gross unrealized losses were associated with securities depressed greater than 20%. The securities depressed more than 20% are primarily corporate securities in the energy sector that decreased in value primarily due the decline in oil prices previously discussed; see Energy Exposure in the Investment Portfolio and Risk Management section of this MD&A. For further information on the energy sector.

As part of the Company's ongoing security monitoring process, the Company has reviewed its AFS securities in an unrealized loss position and concluded that these securities are temporarily depressed and are expected to recover in value as the securities approach maturity or as market spreads tighten. For these securities in an unrealized loss position where a credit impairment has not been recorded, the Company's best estimate of expected future cash flows are sufficient to recover the amortized cost basis of the security. Furthermore, the Company neither has an intention to sell nor does it expect to be required to sell these securities. For further information regarding the Company's impairment analysis, see Other-Than-Temporary Impairments in the Investment Portfolio Risks and Risk Management section of this MD&A.

The following tables present the Company's unrealized loss aging for AFS securities by length of time the security was in a continuous unrealized loss position.

| Consecutive Months | December 31, 2015 | | | | December 31, 2014 | | | |
|------------------------------------|-------------------|------------------------|-----------------|---------------------|-------------------|------------------------|-----------------|-----------------|
| | Items | Cost or Amortized Cost | Fair Value | Unrealized Loss [1] | Items | Cost or Amortized Cost | Fair Value | Unrealized Loss |
| Three months or less | 1,199 | \$ 4,168 | \$ 4,112 | \$ (56) | 989 | \$ 1,688 | \$ 1,662 | \$ (26) |
| Greater than three to six months | 473 | 1,315 | 1,266 | (49) | 400 | 799 | 767 | (32) |
| Greater than six to nine months | 587 | 2,192 | 2,086 | (106) | 98 | 179 | 173 | (6) |
| Greater than nine to eleven months | 172 | 504 | 473 | (31) | 50 | 48 | 46 | (2) |
| Twelve months or more | 383 | 1,545 | 1,443 | (100) | 407 | 2,386 | 2,245 | (142) |
| Total | 2,814 | \$ 9,724 | \$ 9,380 | \$ (342) | 1,944 | \$ 5,100 | \$ 4,893 | \$ (208) |

[1] Unrealized losses exclude the fair value of bifurcated embedded derivative features of certain securities as changes in value are recorded in net realized capital gains (losses).

The following table presents the Company's unrealized loss aging for AFS securities continuously depressed over 20% by length of time (also included in the table above).

| Consecutive Months | December 31, 2015 | | | | December 31, 2014 | | | |
|------------------------------------|-------------------|------------------------|---------------|---------------------|-------------------|------------------------|--------------|-----------------|
| | Items | Cost or Amortized Cost | Fair Value | Unrealized Loss [1] | Items | Cost or Amortized Cost | Fair Value | Unrealized Loss |
| Three months or less | 132 | \$ 147 | \$ 109 | \$ (38) | 69 | \$ 96 | \$ 74 | \$ (22) |
| Greater than three to six months | 66 | 45 | 30 | (15) | 19 | 4 | 2 | (2) |
| Greater than six to nine months | 5 | 2 | 1 | (1) | 5 | 1 | — | (1) |
| Greater than nine to eleven months | 3 | 9 | 7 | (2) | 5 | — | — | — |
| Twelve months or more | 26 | 17 | 12 | (5) | 26 | 28 | 17 | (11) |
| Total | 232 | \$ 220 | \$ 159 | \$ (61) | 124 | \$ 129 | \$ 93 | \$ (36) |

[1] Unrealized losses exclude the fair value of bifurcated embedded derivatives features of certain securities as changes in value are recorded in net realized capital gains (losses).

Other-Than-Temporary Impairments

The following table presents the Company's impairments recognized in earnings by security type.

| | For the years ended December 31, | |
|----------------|----------------------------------|--------------|
| | 2015 | 2014 |
| CRE CDOs | \$ 1 | \$ — |
| CMBS | | |
| Bonds | — | 1 |
| IOs | 1 | 1 |
| Corporate | 42 | 16 |
| Equity | 14 | 8 |
| Municipal | 2 | 1 |
| RMBS sub-prime | 1 | 1 |
| Other | — | 1 |
| Total | \$ 61 | \$ 29 |

Year ended December 31, 2015

For the year ended December 31, 2015, impairments recognized in earnings were comprised of securities that the Company intends to sell ("intent-to-sell impairments") of \$24, credit impairments of \$23, and impairments on equity securities of \$14.

For the year ended December 31, 2015, impairments were primarily in the corporate sector and resulted from \$22 and \$20 of credit and intent-to-sell impairments, respectively. The Company incorporates its best estimate of future performance using internal assumptions and judgments that are informed by economic and industry specific trends, as well as our expectations with respect to security specific developments. Non-credit impairments recognized in other comprehensive income were \$2 for the year ended December 31, 2015. These non-credit impairments represent the difference between fair value and the Company's best estimate of expected future cash flows discounted at the security's effective yield prior to impairment, rather than at current market implied credit spreads. Future impairments may develop as the result of changes in intent to sell specific securities or if actual results underperform current modeling assumptions, which may be the result of, but are not limited to, macroeconomic factors and security-specific performance below current expectations. Ultimate loss formation will be a function of macroeconomic factors and idiosyncratic security-specific performance.

Year ended December 31, 2014

For the year ended December 31, 2014, impairments recognized in earnings were comprised of credit impairments of \$16, primarily concentrated in corporate securities. Also included were securities that the Company intends to sell of \$11, primarily related to equity securities. In addition, impairments recognized in earnings included impairments on equity securities of \$1 that were in an unrealized loss position and the Company no longer believed the securities would recover in the foreseeable future.

CAPITAL RESOURCES AND LIQUIDITY

Capital resources and liquidity represent the overall strength of Hartford Life Insurance Company and its ability to generate strong cash flows, borrow funds at competitive rates and to meet operating needs over the next twelve months.

Liquidity Requirements and Sources of Capital

The Hartford has an intercompany liquidity agreement that allows for short-term advances of funds among The Hartford Financial Services Group, Inc. ("HFSG Holding Company") and certain affiliates of up to \$2.0 billion for liquidity and other general corporate purposes. The Connecticut Insurance Department ("CTDOI") granted approval for certain affiliated insurance companies that are parties to the agreement to treat receivables from a parent, including the HFSG Holding Company, as admitted assets for statutory accounting purposes.

Derivative Commitments

Certain of the Company's derivative agreements contain provisions that are tied to the financial strength ratings, as set by nationally recognized statistical agencies, of the individual legal entity that entered into the derivative agreement. If the legal entity's financial strength were to fall below certain ratings, the counterparties to the derivative agreements could demand immediate and ongoing full collateralization and in certain instances demand immediate settlement of all outstanding derivative positions traded under each impacted bilateral agreement. The settlement amount is determined by netting the derivative positions transacted under each agreement. If the termination rights were to be exercised by the counterparties, it could impact the legal entity's ability to conduct hedging activities by increasing the associated costs and decreasing the willingness of counterparties to transact with the legal entity. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that are in a net liability position as of December 31, 2015, was \$870. Of this \$870 the legal entities have posted collateral of \$998 in the normal course of business. In addition, the Company has posted collateral of \$34 associated with a customized GMWB derivative. Based on derivative market values as of December 31, 2015, a downgrade of one or two levels below the current financial strength ratings by either Moody's or S&P would not require additional assets to be posted as collateral. These collateral amounts could change as derivative market values change, as a result of changes in our hedging activities or to the extent changes in contractual terms are negotiated. The nature of the collateral that we would post, if required, would be primarily in the form of U.S. Treasury bills, U.S. Treasury notes and government agency securities.

Insurance Operations

Total general account contractholder obligations are supported by \$32 billion of cash and total general account invested assets to meet liquidity needs. The following table summarizes the Company's fixed maturities, short-term investments, and cash, as of December 31, 2015:

| | | |
|-----------------------------|-----------|---------------|
| Fixed maturities | \$ | 24,822 |
| Short-term investments | | 572 |
| Cash | | 305 |
| Less: Derivative collateral | | 1,215 |
| Total | \$ | 24,484 |

Capital resources available to fund liquidity, upon contract holder surrender, are a function of the legal entity in which the liquidity requirement resides. Obligations related to life and annuity insurance products will be generally funded by both Hartford Life Insurance Company ("HLIC") and Hartford Life and Annuity Insurance Company ("HLAI"); obligations related to retirement and institutional investment products will be generally funded by Hartford Life Insurance Company.

The Company is a member of the Federal Home Loan Bank of Boston ("FHLBB"). Membership allows the Company access to collateralized advances, which may be used to support various spread-based business and enhance liquidity management. FHLBB membership requires the company to own member stock and advances require the purchase of activity stock. The amount of advances that can be taken are dependent on the asset types pledged to secure the advances. The Connecticut Department of Insurance ("CTDOI") will permit the Company to pledge up to \$1.2 billion in qualifying assets to secure FHLBB advances for 2016. The pledge limit is recalculated annually based on statutory admitted assets and capital and surplus. The Company would need to seek the prior approval of the CTDOI in order to exceed these limits. As of December 31, 2015, HLIC had no advances outstanding under the FHLBB facility.

| Contractholder Obligations | | As of December 31, 2015 |
|---|-----------|--------------------------------|
| Total Contractholder obligations | \$ | 165,156 |
| Less: Separate account assets [1] | | 120,111 |
| General account contractholder obligations | \$ | 45,045 |
| Composition of General Account Contractholder Obligations | | |
| Contracts without a surrender provision and/or fixed payout dates [2] | \$ | 18,733 |
| Fixed MVA annuities [3] | | 5,574 |
| Other [4] | | 20,738 |
| General account contractholder obligations | \$ | 45,045 |

[1] In the event customers elect to surrender separate account assets, the Company will use the proceeds from the sale of the assets to fund the surrender, and the Company's liquidity position will not be impacted. In many instances the Company will receive a percentage of the surrender charge, increasing the Company's liquidity position. In addition, a surrender of variable annuity separate account or general account assets will decrease the Company's obligation for payments on guaranteed living and death benefits.

[2] Relates to contracts such as payout annuities or institutional notes or surrenders of term life, group benefit contracts or death and living benefit reserves for which surrenders will have no current effect on the Company's liquidity requirements.

[3] Relates to annuities that are recorded in the general account under U.S. GAAP as the contractholders are subject to the Company's credit risk, although these annuities are held in a statutory separate account. In the statutory separate account, the Company is required to maintain invested assets with a fair value greater than or equal to the MVA surrender value of the Fixed MVA contract. In the event assets decline in value at a greater rate than the MVA surrender value of the Fixed MVA contract, the Company is required to contribute additional capital to the statutory separate account. The Company will fund these required contributions with operating cash flows or short-term investments. In the event that operating cash flows or short-term investments are not sufficient to fund required contributions, the Company may have to sell other invested assets at a loss, potentially resulting in a decrease in statutory surplus. As the fair value of invested assets in the statutory separate account are at least equal to the MVA surrender value of the Fixed MVA contract, surrender of Fixed MVA annuities will have an insignificant impact on the liquidity requirements of the Company.

[4] Surrenders of, or policy loans taken from, as applicable, these general account liabilities, which include the general account option for Individual Annuity individual variable annuities and the variable life contracts of the former Individual Life business, the general account option for annuities of the former Retirement Plans business and universal life contracts sold by the former Individual Life business may be funded through operating cash flows of the Company, available short-term investments, or the Company may be required to sell fixed maturity investments to fund the surrender payment. Sales of fixed maturity investments could result in the recognition of significant realized losses and insufficient proceeds to fully fund the surrender amount. In this circumstance, the Company may need to take other actions, including enforcing certain contract provisions which could restrict surrenders and/or slow or defer payouts. The Company has ceded reinsurance in connection with the sales of its Retirement Plans and Individual Life businesses in 2013 to MassMutual and Prudential, respectively. The reinsurance transactions do not extinguish the Company's primary liability on the insurance policies issued under these businesses. For further information regarding the sale of Retirement Plans and Individual Life, see Note 12 - Discontinued Operations and Business Dispositions of Notes to the Consolidated Financial Statements.

Off-Balance Sheet Arrangements and Aggregate Contractual Obligations

The Company does not have any off-balance sheet arrangements that are reasonably likely to have a material effect on the financial condition, results of operations, liquidity, or capital resources of the Company, except for unfunded commitments to purchase investments in limited partnerships and other alternative investments, private placements, and mortgage loans of \$378 as disclosed in Note 9 - Commitments and Contingencies of Notes to Consolidated Financial Statements.

The following table summarizes the Company's contractual obligations as of December 31, 2015 :

| | Payments due by period | | | | |
|--|-------------------------------|-----------------------------|----------------------|----------------------|----------------------------------|
| | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
| Life and annuity obligations [1] | \$ 247,934 | \$ 16,880 | \$ 29,266 | \$ 24,816 | \$ 176,972 |
| Operating lease obligations [2] | 19 | 6 | 8 | 3 | 2 |
| Purchase obligations [3] | 478 | 450 | 17 | 11 | — |
| Other liabilities reflected on the balance sheet [4] | 645 | 624 | 21 | — | — |
| Total | \$ 249,076 | \$ 17,960 | \$ 29,312 | \$ 24,830 | \$ 176,974 |

- [1] *Estimated life and annuity obligations include death claims, other charges associated with policyholder reserves, policy surrenders and policyholder dividends, offset by expected future deposits on in-force contracts. Estimated life and annuity obligations are based on mortality, morbidity and lapse assumptions comparable with the Company's historical experience, modified for recent observed trends. The Company has also assumed market growth and interest crediting consistent with other assumptions. In contrast to this table, the majority of the Company's obligations are recorded on the balance sheet at the current account values and do not incorporate an expectation of future market growth, interest crediting, or future deposits. Therefore, the estimated obligations presented in this table significantly exceed the liabilities recorded in reserve for future policy benefits and unpaid loss and loss adjustment expenses, other policyholder funds and benefits payable, and separate account liabilities. Due to the significance of the assumptions used, the amounts presented could materially differ from actual results.*
- [2] *Includes future minimum lease payments on operating lease agreements.*
- [3] *Included in purchase obligations is \$35 relating to contractual commitments to purchase various goods and services such as maintenance and information technology in the normal course of business. Purchase obligations exclude contracts that are cancelable without penalty, or contracts that do not specify minimum levels of goods or services to be purchased.*
- [4] *Includes consumer notes of \$40. Consumer notes include principal payments, contractual interest for fixed rate notes, and interest based on current rates for floating rate notes.*

Dividends

Dividends to the Company from its insurance subsidiaries are restricted, as is the ability of the Company to pay dividends to its parent company. Future dividend decisions will be based on, and affected by, a number of factors, including the operating results and financial requirements of the Company on a stand-alone basis and the impact of regulatory restrictions.

The payment of dividends by Connecticut-domiciled insurers is limited under the insurance holding company laws of Connecticut. These laws require notice to and approval by the state insurance commissioner for the declaration or payment of any dividend, which, together with other dividends or distributions made within the preceding twelve months, exceeds the greater of (i) 10% of the insurer's policyholder surplus as of December 31 of the preceding year or (ii) net income (or net gain from operations) for the twelve-month period ending on the thirty-first day of December last preceding, in each case determined under statutory insurance accounting principles. In addition, if any dividend of a Connecticut-domiciled insurer exceeds the insurer's earned surplus, it requires the prior approval of the CTDOI. The insurance holding company laws of the other jurisdictions in which the Company's insurance subsidiaries are incorporated (or deemed commercially domiciled) generally contain similar (although in certain instances somewhat more restrictive) limitations on the payment of dividends.

In 2015 the Company paid dividends of approximately \$1.0 billion to its parent, based on the approval of the CTDOI.

The Company's subsidiaries are permitted to pay up to a maximum of approximately \$415 in dividends without prior approval from the applicable insurance commissioner. On January 29, 2016, Hartford Life and Annuity paid an extraordinary dividend of \$500 to the Company which was subsequently paid as an extraordinary dividend to Hartford Life, Inc. As a result of this dividend, the Company has no ordinary dividend capacity remaining for the year.

The Company anticipates paying an additional \$250 extraordinary dividend to its parent during 2016, subject to regulatory approval.

Cash Flows

| | 2015 | 2014 |
|---|------------|------------|
| Net cash provided by operating activities | \$ 682 | \$ 669 |
| Net cash provided by investing activities | \$ 1,446 | \$ 2,510 |
| Net cash used for financing activities | \$ (2,081) | \$ (3,364) |
| Cash - end of year | \$ 305 | \$ 258 |

Net cash provided by operating activities increased in 2015 as compared to 2014 due to a decrease in operating expenses paid, partially offset by an increase in claims and benefits paid.

Net cash provided by investing activities in 2015 primarily relates to net proceeds from short-term investments of approximately \$1.6 billion. Net cash provided by investing activities in 2014 primarily relates to net proceeds from available-for-sale securities of approximately \$2.7 billion.

Net cash used for financing activities in 2015 relates to a return of capital to the parent of approximately \$1.0 billion and net payments for deposits, transfers and withdrawals for investment and universal life-type contracts of approximately \$1.3 billion. Net cash used for financing activities in 2014 relates to net outflows on investment and universal life-type contracts of approximately \$3.1 billion and a return of capital to the parent of \$275.

Operating cash flows in both periods have been adequate to meet liquidity requirements.

Ratings

Ratings can have an impact on the Company's reinsurance and derivative contracts. There can be no assurance that the Company's ratings will continue for any given period of time or that they will not be changed. In the event the Company's ratings are downgraded, reinsurance contracts may be adversely impacted and the Company may be required to post additional collateral on certain derivative contracts.

The following table summarizes Hartford Life Insurance Company's significant member companies' financial ratings from the major independent rating organizations as of February 24, 2016 :

| Insurance Financial Strength Ratings: | A.M. Best | Standard & Poor's | Moody's |
|--|------------------|------------------------------|----------------|
| Hartford Life Insurance Company | A- | BBB+ | Baa2 |
| Hartford Life and Annuity Insurance Company | A- | BBB+ | Baa2 |

These ratings are not a recommendation to buy or hold any of the Company's securities and they may be revised or revoked at any time at the sole discretion of the rating organization.

The agencies consider many factors in determining the final rating of an insurance company. One consideration is the relative level of statutory capital and surplus, (referred to collectively as "statutory capital") necessary to support the business written and is reported in accordance with accounting practices prescribed by the applicable state insurance department.

Statutory Capital

The Company's stockholder's equity, as prepared using U.S. GAAP, was \$8.2 billion as of December 31, 2015 . The Company's estimated aggregate statutory capital and surplus, as prepared in accordance with the National Association of Insurance Commissioners' Accounting Practices and Procedures Manual ("U.S. STAT"), was \$4.9 billion as of December 31, 2015 .

Significant differences between U.S. GAAP stockholder's equity and aggregate statutory capital and surplus prepared in accordance with U.S. STAT include the following:

- U.S. STAT excludes equity of non-insurance and foreign insurance subsidiaries not held by U.S. insurance subsidiaries.
- Costs incurred by the Company to acquire insurance policies are deferred under U.S. GAAP while those costs are expensed immediately under U.S. STAT.
- Temporary differences between the book and tax basis of an asset or liability which are recorded as deferred tax assets are evaluated for recoverability under U.S. GAAP while those amounts deferred are subject to limitations under U.S. STAT.

- The assumptions used in the determination of benefit reserves are prescribed under U.S. STAT, while the assumptions used under U.S. GAAP are generally the Company's best estimates. The methodologies for determining life insurance reserve amounts are also different. For example, reserving for living benefit reserves under U.S. STAT is generally addressed by the Commissioners' Annuity Reserving Valuation Methodology and the related Actuarial Guidelines, while under U.S. GAAP, those same living benefits are either embedded derivatives recorded at fair value or are recorded as SOP 03-1 reserves. The sensitivity of these life insurance reserves to changes in equity markets, as applicable, will be different between U.S. GAAP and U.S. STAT.
- The difference between the amortized cost and fair value of fixed maturity and other investments, net of tax, is recorded as an increase or decrease to the carrying value of the related asset and to equity under U.S. GAAP, while U.S. STAT only records certain securities at fair value, such as equity securities and certain lower rated bonds required by the NAIC to be recorded at the lower of amortized cost or fair value.
- U.S. STAT for life insurance companies establishes a formula reserve for realized and unrealized losses due to default and equity risks associated with certain invested assets (the Asset Valuation Reserve), while U.S. GAAP does not. Also, for those realized gains and losses caused by changes in interest rates, U.S. STAT for life insurance companies defers and amortizes the gains and losses, caused by changes in interest rates, into income over the original life to maturity of the asset sold (the Interest Maintenance Reserve) while U.S. GAAP does not.

In addition, certain assets, including a portion of premiums receivable and fixed assets, are non-admitted (recorded at zero value and charged against surplus) under U.S. STAT. U.S. GAAP generally evaluates assets based on their recoverability.

Risk-based Capital

The Company's U.S. insurance companies' states of domicile impose risk-based capital ("RBC") requirements. The requirements provide a means of measuring the minimum amount of statutory capital appropriate for an insurance company to support its overall business operations, based on its size and risk profile. Regulatory compliance is determined by a ratio of a company's total adjusted capital ("TAC") to its authorized control level RBC ("ACL RBC"). Companies below specific trigger points or ratios are classified within certain levels, each of which requires specified corrective action. The minimum level of TAC before corrective action commences ("Company Action Level") is two times the ACL RBC. The adequacy of a company's capital is determined by the ratio of a company's TAC to its Company Action Level, known as the "RBC ratio". The Company and all of its operating insurance subsidiaries had RBC ratios in excess of the minimum levels required by the applicable insurance regulations. The RBC ratios for the Company and its principal life insurance operating subsidiaries were all in excess of 400% of their Company Action Levels as of December 31, 2015 and 2014. The reporting of RBC ratios is not intended for the purpose of ranking any insurance company, or for use in connection with any marketing, advertising or promotional activities.

Contingencies

Legal Proceedings

For further information on other contingencies, see Note 9 - Commitments and Contingencies of Notes to Consolidated Financial Statements.

Tax proposals and regulatory initiatives which have been or are being considered by Congress and/or the United States Treasury Department could have a material effect on the insurance business. These proposals and initiatives include, or could include, new taxes or assessments on large financial institutions, changes pertaining to the income tax treatment of insurance companies and life insurance products and annuities, repeal or reform of the estate tax and comprehensive federal tax reform, and changes to the regulatory structure for financial institutions. The nature and timing of any Congressional or regulatory action with respect to any such efforts is unclear.

Legislative Initiatives

Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act")

Since it was enacted in 2010, the Dodd-Frank act has resulted in significant changes to the regulation of the financial services industry, including changes to the rules governing derivatives, restrictions on proprietary trading by certain entities, the creation of a Federal Insurance Office within the U.S. Treasury, and enhancements to corporate governance rules, among other things. The Dodd-Frank Act requires significant rulemaking across numerous agencies within the federal government. Rulemaking and implementation of newly-adopted rules is ongoing and may affect our operations and governance in ways that could adversely affect our financial condition and results of operations.

Budget of the United States Government

On February 9, 2016, the Obama Administration released its “Fiscal Year 2017, Budget of the U.S. Government” (the “Budget”). Although the Administration has not released proposed statutory language, the Budget includes proposals that if enacted, would affect the taxation of life insurance companies and certain life insurance products. In particular, the proposals would change the method used to determine the amount of dividend income received by a life insurance company on assets held in separate accounts used to support products, including variable life insurance and variable annuity contracts, which are eligible for the dividend received deduction (“DRD”). The DRD reduces the amount of dividend income subject to tax and is a significant component of the difference between the Company's actual tax expense and expected amount determined using the federal statutory tax rate of 35%. If this proposal were enacted, the Company's actual tax expense could increase, reducing earnings.

United States Department of Labor Proposed Rule

In April, 2015, the U.S. Department of Labor (“DOL”) issued a proposed regulation that would, if finalized in its current form, expand the range of activities that would be considered to be fiduciary investment advice under the Employee Retirement Income Security Act of 1974 (“ERISA”) and the Internal Revenue Code. In its proposed form, the rule could have an adverse impact on our current offerings of certain insurance products and investment products, along with contracts in our run-off lines of business. If enacted in its current form, the proposed rule could impact the way we provide investment-related information and support to financial advisors, plan sponsors, plan participants, plan beneficiaries and Individual Retirement Account (IRA) owners. Because we cannot predict the exact nature and extent of changes that may be made to the proposed rule when finalized, the potential effect on our businesses is undeterminable at this time.

Guaranty Fund and Other Insurance-related Assessments

For a discussion regarding Guaranty Fund and Other Insurance-related Assessments, see Note 9 - Commitments and Contingencies of Notes to Consolidated Financial Statements.

IMPACT OF NEW ACCOUNTING STANDARDS

For a discussion of accounting standards, see Note 1 - Basis of Presentation and Significant Accounting Policies of Notes to Consolidated Financial Statements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by this item is set forth in the Enterprise Risk Management section of Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations and is incorporated herein by reference.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Index to Consolidated Financial Statements and Schedules elsewhere herein.

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

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's principal executive officer and its principal financial officer, based on their evaluation of the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) have concluded that the Company's disclosure controls and procedures are effective for the purposes set forth in the definition thereof in Exchange Act Rule 13a-15(e) as of December 31, 2015 .

Management's Annual Report on Internal Control Over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934.

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 accounting principles generally accepted in the United States. A company's 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 the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed its internal controls over financial reporting as of December 31, 2015 in relation to criteria for effective internal control over financial reporting described in "*Internal Control-Integrated Framework (2013)*" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment under those criteria, The Company's management concluded that its internal control over financial reporting was effective as of December 31, 2015 .

This annual report does not include an attestation report of the company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting that occurred during the Company's fourth fiscal quarter of 2015 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, AND EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE OF HARTFORD LIFE INSURANCE COMPANY

Omitted pursuant to General Instruction I(2)(c) of Form 10-K.

Item 11. EXECUTIVE COMPENSATION

Omitted pursuant to General Instruction I(2)(c) of Form 10-K.

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

Omitted pursuant to General Instruction I(2)(c) of Form 10-K.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Omitted pursuant to General Instruction I(2)(c) of Form 10-K.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table presents fees for professional services rendered by Deloitte & Touche LLP, the member firms of Deloitte Touche Tohmatsu, and their respective affiliates (collectively, the “Deloitte Entities”) for the audit of the Company’s annual financial statements, audit-related services, tax services and all other services for the years ended December 31, 2015 and 2014.

(amounts are in whole dollars)

| | Year Ended December 31, 2015 | Year Ended December 31, 2014 |
|----------------------------|---------------------------------|---------------------------------|
| (1) Audit fees | \$ 6,173,084 | \$ 7,620,174 |
| (2) Audit-related fees (a) | — | 316,742 |
| (3) Tax fees | — | — |
| (4) All other fees (b) | — | 53,601 |
| Total | \$ 6,173,084 | \$ 7,990,517 |

(a) Fees for the year ended December 31, 2014 principally consisted of divestiture related services.

(b) Fees for the year ended December 31, 2014 principally consisted of two separate internal controls projects.

The Hartford’s Audit Committee (the “Committee”) concluded that the provision of the non-audit services provided to The Hartford by the Deloitte Entities during 2015 and 2014 was compatible with maintaining the Deloitte Entities’ independence.

The Committee has established policies requiring pre-approval of audit and non-audit services provided by the independent registered public accounting firm. The policies require that the Committee pre-approve specifically described audit, and audit-related services, annually. For the annual pre-approval, the Committee approves categories of audit services, audit-related services and related fee budgets. For all pre-approvals, the Committee considers whether such services are consistent with the rules of the SEC and the Public Company Accounting Oversight Board on auditor independence. The independent registered public accounting firm and management report to the Committee on a timely basis regarding the services rendered by and actual fees paid to the independent registered public accounting firm to ensure that such services are within the limits approved by the Committee. The Committee’s policies require specific pre-approval of all tax services, internal control-related services and all other permitted services on an individual project basis. As provided by the Committee’s policies, the Committee has delegated to its Chairman the authority to address any requests for pre-approval of services between Committee meetings, up to a maximum of \$100 thousand for non-tax services and up to a maximum of \$5 thousand for tax services. The Chairman must report any pre-approvals to the full Committee at its next scheduled meeting.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as a part of this report:

- (1) **Consolidated Financial Statements.** See Index to Consolidated Financial Statements and Schedules elsewhere herein.
- (2) **Consolidated Financial Statement Schedules.** See Index to Consolidated Financial Statement and Schedules elsewhere herein.
- (3) **Exhibits.** See Exhibit Index elsewhere herein.

HARTFORD LIFE INSURANCE COMPANY
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SCHEDULES

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| Consolidated Statements of Operations — For the Years Ended December 31, 201 5, 2014 and 2013 | F- 3 |
| Consolidated Statements of Comprehensive Income (Loss) — For the Years Ended December 31, 201 5, 2014 and 2013 | F- 4 |
| Consolidated Balance Sheets — As of December 31, 201 5 and 2014 | F- 5 |
| Consolidated Statements of Changes in Stockholder’s Equity — For the Years Ended December 31, 201 5, 2014 and 2013 | F- 6 |
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholder of
Hartford Life Insurance Company
Hartford, Connecticut

We have audited the accompanying consolidated balance sheets of Hartford Life Insurance Company and subsidiaries (the "Company") as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income, changes in stockholder's equity, and cash flows for each of the three years in the period ended December 31, 2015. Our audits also included the consolidated financial statement schedules listed in the Index at Item 15. These consolidated financial statements and financial statement schedules are the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements and financial statement schedules based on our 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 audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Hartford Life Insurance Company and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such consolidated financial statement schedules, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

DELOITTE & TOUCHE LLP
Hartford, Connecticut
February 26, 2016

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
Consolidated Statements of Operations

| <i>(In millions)</i> | For the years ended December 31, | | |
|--|----------------------------------|---------------|---------------|
| | 2015 | 2014 | 2013 |
| Revenues | | | |
| Fee income and other | \$ 1,097 | \$ 1,210 | \$ 1,462 |
| Earned premiums | 92 | 32 | 184 |
| Net investment income | 1,456 | 1,543 | 1,683 |
| Net realized capital gains (losses): | | | |
| Total other-than-temporary impairment (“OTTI”) losses | (63) | (31) | (54) |
| OTTI losses recognized in other comprehensive income (losses) (“OCI”) | 2 | 2 | 9 |
| Net OTTI losses recognized in earnings | (61) | (29) | (45) |
| Net realized capital gains on investments transferred at fair value in business disposition by reinsurance | — | — | 1,561 |
| Other net realized capital gains (losses) | (85) | 606 | (1,190) |
| Total net realized capital gains (losses) | (146) | 577 | 326 |
| Total revenues | 2,499 | 3,362 | 3,655 |
| Benefits, losses and expenses | | | |
| Benefits, loss and loss adjustment expenses | 1,402 | 1,460 | 1,758 |
| Amortization of deferred policy acquisition costs | 69 | 206 | 228 |
| Insurance operating costs and other expenses | 524 | 851 | (401) |
| Reinsurance (gain) loss on disposition | (28) | (23) | 1,491 |
| Dividends to policyholders | 2 | 7 | 18 |
| Total benefits, losses and expenses | 1,969 | 2,501 | 3,094 |
| Income from continuing operations before income taxes | 530 | 861 | 561 |
| Income tax expense | 30 | 184 | 49 |
| Income from continuing operations, net of tax | 500 | 677 | 512 |
| Loss from discontinued operations, net of tax | — | — | (41) |
| Net income | 500 | 677 | 471 |
| Net income attributable to noncontrolling interest | — | 1 | 6 |
| Net income attributable to Hartford Life Insurance Company | \$ 500 | \$ 676 | \$ 465 |

See Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income

| <i>(In millions)</i> | Year Ended December 31, | | |
|--|-------------------------|-----------------|-----------------|
| | 2015 | 2014 | 2013 |
| Comprehensive Income | | | |
| Net income | \$ 500 | \$ 677 | \$ 471 |
| Other comprehensive income (loss): | | | |
| Change in net unrealized gain on securities | (615) | 659 | (1,257) |
| Change in net gain on cash-flow hedging instruments | (13) | (9) | (179) |
| Change in foreign currency translation adjustments | — | (3) | 23 |
| OCI, net of tax | (628) | 647 | (1,413) |
| Comprehensive income (loss) | (128) | 1,324 | (942) |
| Less: Comprehensive income attributable to noncontrolling interest | — | 1 | 6 |
| Comprehensive income (loss) attributable to Hartford Life Insurance Company | \$ (128) | \$ 1,323 | \$ (948) |

See Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
Consolidated Balance Sheets

| <i>(In millions, except for share data)</i> | As of December 31, | |
|--|--------------------|-------------------|
| | 2015 | 2014 |
| Assets | | |
| Investments: | | |
| Fixed maturities, available-for-sale, at fair value (amortized cost of \$23,559 and \$23,260) | \$ 24,657 | \$ 25,436 |
| Fixed maturities, at fair value using the fair value option (includes variable interest entity assets, at fair value, of \$49 and \$139) | 165 | 280 |
| Equity securities, available-for-sale, at fair value (cost of \$471 and \$525) (includes equity securities, at fair value using the fair value option, of \$281 and \$248, and variable interest entity assets of \$1 and \$0) | 459 | 514 |
| Mortgage loans (net of allowance for loan losses of \$19 and \$15) | 2,918 | 3,109 |
| Policy loans, at outstanding balance | 1,446 | 1,430 |
| Limited partnerships, and other alternative investments (includes variable interest entity assets of \$2 and \$3) | 1,216 | 1,309 |
| Other investments | 293 | 442 |
| Short-term investments (includes variable interest entity assets of \$2 and \$15) | 572 | 2,162 |
| Total investments | 31,726 | 34,682 |
| Cash | 305 | 258 |
| Premiums receivable and agents' balances, net | 19 | 27 |
| Reinsurance recoverables | 20,499 | 20,053 |
| Deferred policy acquisition costs | 542 | 521 |
| Deferred income taxes, net | 1,581 | 1,237 |
| Other assets | 567 | 308 |
| Separate account assets | 120,111 | 134,689 |
| Total assets | \$ 175,350 | \$ 191,775 |
| Liabilities | | |
| Reserve for future policy benefits and unpaid losses and loss adjustment expenses | \$ 13,850 | \$ 13,624 |
| Other policyholder funds and benefits payable | 31,157 | 31,994 |
| Other liabilities (including variable interest entity liabilities of \$12 and \$22) | 2,070 | 2,177 |
| Separate account liabilities | 120,111 | 134,689 |
| Total liabilities | 167,188 | 182,484 |
| Commitments and Contingencies (Note 11) | | |
| Stockholder's Equity | | |
| Common stock—1,000 shares authorized, issued and outstanding, par value \$5,690 | 6 | 6 |
| Additional paid-in capital | 5,687 | 6,688 |
| Accumulated other comprehensive income, net of tax | 593 | 1,221 |
| Retained earnings | 1,876 | 1,376 |
| Total stockholder's equity | 8,162 | 9,291 |
| Total liabilities and stockholder's equity | \$ 175,350 | \$ 191,775 |

See Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholder's Equity

| <i>(In millions)</i> | Common Stock | Additional Paid-In Capital | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Non-Controlling Interest | Total Stockholder's Equity |
|--|--------------|-------------------------------|---|----------------------|-----------------------------|----------------------------------|
| Balance, December 31, 2014 | \$ 6 | \$ 6,688 | \$ 1,221 | \$ 1,376 | \$ — | \$ 9,291 |
| Capital contributions to parent | — | (1,001) | — | — | — | (1,001) |
| Net income | — | — | — | 500 | — | 500 |
| Total other comprehensive income | — | — | (628) | — | — | (628) |
| Balance, December 31, 2015 | \$ 6 | \$ 5,687 | \$ 593 | \$ 1,876 | \$ — | \$ 8,162 |
| Balance, December 31, 2013 | \$ 6 | \$ 6,959 | \$ 574 | \$ 700 | \$ — | \$ 8,239 |
| Capital contributions to parent | — | (271) | — | — | — | (271) |
| Net income | — | — | — | 676 | 1 | 677 |
| Change in non-controlling interest ownership | — | — | — | — | (1) | (1) |
| Total other comprehensive income | — | — | 647 | — | — | 647 |
| Balance, December 31, 2014 | \$ 6 | \$ 6,688 | \$ 1,221 | \$ 1,376 | \$ — | \$ 9,291 |
| Balance, December 31, 2012 | \$ 6 | \$ 8,155 | \$ 1,987 | \$ 235 | \$ — | \$ 10,383 |
| Capital contributions to parent | — | (1,196) | — | — | — | (1,196) |
| Net income | — | — | — | 465 | 6 | 471 |
| Change in non-controlling interest ownership | — | — | — | — | (6) | (6) |
| Total other comprehensive income | — | — | (1,413) | — | — | (1,413) |
| Balance, December 31, 2013 | \$ 6 | \$ 6,959 | \$ 574 | \$ 700 | \$ — | \$ 8,239 |

See Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
Consolidated Statements of Cash Flows

| <i>(In millions)</i> | For the years ended December 31, | | |
|--|---|----------------|----------------|
| | 2015 | 2014 | 2013 |
| Operating Activities | | | |
| Net income | \$ 500 | \$ 677 | \$ 471 |
| Adjustments to reconcile net income to net cash provided by (used for) operating activities | | | |
| Amortization of deferred policy acquisition costs | 69 | 206 | 228 |
| Additions to deferred policy acquisition costs | (7) | (14) | (16) |
| Net realized capital (gains) losses | 146 | (577) | (678) |
| Reinsurance (gain) loss on disposition | (28) | (23) | 1,491 |
| Depreciation and amortization (accretion), net | (14) | 6 | 53 |
| Other operating activities, net | 38 | 248 | (328) |
| Change in assets and liabilities: | | | |
| Increase in future policy benefits and unpaid losses and loss adjustment expenses | 276 | 586 | 230 |
| (Increase) decrease in reinsurance recoverables | (14) | 170 | (795) |
| Decrease (increase) in receivables and other assets | 257 | (30) | (80) |
| Decrease in payables and accruals | (479) | (882) | (1,532) |
| (Decrease) increase in accrued and deferred income taxes | (62) | 302 | 589 |
| Net disbursements from investment contracts related to policyholder funds – international unit-linked bonds and pension products | — | — | (1,833) |
| Net decrease in equity securities, trading | — | — | 1,835 |
| Net cash provided by (used for) operating activities | 682 | 669 | (365) |
| Investing Activities | | | |
| Proceeds from the sale/maturity/prepayment of: | | | |
| Fixed maturities, available-for-sale | 11,465 | 10,333 | 19,206 |
| Fixed maturities, fair value option | 107 | 358 | 322 |
| Equity securities, available-for-sale | 586 | 107 | 81 |
| Mortgage loans | 467 | 377 | 355 |
| Partnerships | 252 | 152 | 127 |
| Payments for the purchase of: | | | |
| Fixed maturities and short-term investments, available-for-sale | (11,755) | (7,385) | (14,532) |
| Fixed maturities, fair value option | (67) | (217) | (134) |
| Equity securities, available-for-sale | (535) | (363) | (79) |
| Mortgage loans | (282) | (146) | (177) |
| Partnerships | (199) | (104) | (99) |
| Proceeds from business sold | — | — | 745 |
| Net proceeds from derivatives | (167) | (66) | (1,900) |
| Net decrease in policy loans | (31) | (14) | (7) |
| Net proceeds from (payments for) short-term investments | 1,604 | (556) | 363 |
| Other investing activities, net | 1 | 34 | (20) |
| Net cash provided by investing activities | 1,446 | 2,510 | 4,251 |
| Financing Activities | | | |
| Deposits and other additions to investment and universal life-type contracts | 4,674 | 4,567 | 5,943 |
| Withdrawals and other deductions from investment and universal life-type contracts | (16,972) | (21,810) | (24,473) |
| Net transfers from separate accounts related to investment and universal life-type contracts | 10,987 | 14,167 | 16,978 |
| Net increase (decrease) in securities loaned or sold under agreements to repurchase | 264 | — | (1,615) |
| Capital contributions to parent | (1,001) | (275) | (1,200) |
| Fee to recapture affiliate reinsurance | — | — | (347) |
| Net repayments at maturity or settlement of consumer notes | (33) | (13) | (77) |
| Net cash used for financing activities | (2,081) | (3,364) | (4,791) |
| Foreign exchange rate effect on cash | — | (3) | 9 |
| Net increase (decrease) in cash | 47 | (188) | (896) |
| Cash — beginning of year | 258 | 446 | 1,342 |
| Cash — end of year | \$ 305 | \$ 258 | \$ 446 |
| Supplemental Disclosure of Cash Flow Information | | | |

| | | | |
|--|------|-----|-----|
| Income tax (payments) refunds received | (80) | 187 | 181 |
| Noncash return of capital | — | (4) | (4) |

See Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollar amounts in millions, unless otherwise stated)

1. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

Hartford Life Insurance Company (together with its subsidiaries, "HLIC", "Company", "we" or "our") is a provider of insurance and investment products in the United States ("U.S.") and is a wholly-owned subsidiary of Hartford Life, Inc., a Delaware corporation ("HLI"). The Hartford Financial Services Group, Inc. ("The Hartford") is the ultimate parent of the Company.

On June 30, 2014, HLI completed the sale of the issued and outstanding equity of Hartford Life Insurance KK, a Japanese company ("HLIKK"), to ORIX Life Insurance Corporation ("Buyer"), a subsidiary of ORIX Corporation, a Japanese company. Upon closing HLIKK recaptured certain risks reinsured to the Company and Hartford Life and Annuity Insurance Company ("HLAI"), a wholly owned subsidiary of the Company, by terminating intercompany agreements. The Buyer is responsible for all liabilities related to the recaptured business. However, HLAI has continued to provide reinsurance for yen denominated fixed payout annuities. For further discussion of this transaction, see Note 4 - Reinsurance and Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.

Effective April 1, 2014, the Company terminated its modified coinsurance ("modco") and coinsurance with funds withheld reinsurance agreement with White River Life Reinsurance ("WRR"), following receipt of approval from the State of Connecticut Insurance Department ("CTDOI") and Vermont Department of Financial Regulation. On April 30, 2014 The Hartford dissolved WRR. For further discussion of this transaction, see Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.

Effective March 3, 2014, The Hartford made Hartford Life and Accident Insurance Company ("HLA") the single nationwide underwriting company for its Group Benefits business by capitalizing HLA to support the Group Benefits business and separating it from the legal entities that support The Hartford's Talcott Resolution operating segment. On January 30, 2014, The Hartford received approval from the CTDOI for HLAI and the Company to dividend approximately \$800 of cash and invested assets to HLA and this dividend was paid on February 27, 2014. All of the issued and outstanding equity of the Company was then distributed from HLA to HLI and the Company became a direct subsidiary of HLI.

On December 12, 2013, the Company completed the sale of the issued and outstanding equity of Hartford Life International Limited, a U.K. company ("HLIL"), to Columbia Insurance Company, a Berkshire Hathaway company.

On January 1, 2013, the Company completed the sale of its Retirement Plans business to Massachusetts Mutual Life Insurance Company ("MassMutual") and on January 2, 2013 the Company completed the sale of its Individual Life insurance business to The Prudential Insurance Company of America ("Prudential"), a subsidiary of Prudential Financial, Inc. These sales were structured as reinsurance transactions.

For further discussion of these transactions, see Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

The Consolidated Financial Statements have been prepared on the basis of accounting principles generally accepted in the United States of America ("U.S. GAAP"), which differ materially from the accounting practices prescribed by various insurance regulatory authorities.

Consolidation

The Consolidated Financial Statements include the accounts of HLIC, companies in which the Company directly or indirectly has a controlling financial interest and those variable interest entities ("VIEs") which the Company is required to consolidate. Entities in which HLIC has significant influence over the operating and financing decisions but is not required to consolidate are reported using the equity method. For further discussions on VIEs, see Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements. All intercompany transactions and balances between HLIC and its subsidiaries have been eliminated.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

Discontinued Operations

The results of operations of a component of the Company are reported in discontinued operations when certain criteria are met as of the date of disposal, or earlier if classified as held-for-sale. When a component is identified for discontinued operations reporting, amounts for prior periods are retrospectively reclassified as discontinued operations. Prior to January 1, 2015, components were identified as discontinued operations if the operations and cash flows of the component had been or would be eliminated from the ongoing operations of the Company as a result of the disposal transaction and the Company would not have any significant continuing involvement in the operations of the component after the disposal transaction. For transactions occurring January 1, 2015 or later, under updated guidance issued by the Financial Accounting Standards Board, components are identified as discontinued operations if they are a major part of an entity's operations and financial results such as a separate major line of business or a separate major geographical area of operations regardless of whether the Company has significant continuing involvement in the operations of the component after the disposal transaction. For information on the specific businesses and related impacts, see Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

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 the disclosure of contingent assets and liabilities at 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 estimated gross profits used in the valuation and amortization of assets and liabilities associated with variable annuity and other universal life-type contracts; evaluation of other-than-temporary impairments on available-for-sale securities and valuation allowances on investments; living benefits required to be fair valued; valuation of investments and derivative instruments; valuation allowance on deferred tax assets; and contingencies relating to corporate litigation and regulatory matters. Certain of these estimates are particularly sensitive to market conditions, and deterioration and/or volatility in the worldwide debt or equity markets could have a material impact on the Consolidated Financial Statements.

Reclassifications

Certain reclassifications have been made to prior year financial information to conform to the current year presentation.

Future Adoption of New Accounting Standards

Financial Instruments

In January 2016, the Financial Accounting Standards Board ("FASB") issued updated guidance for the recognition and measurement of financial instruments. The new guidance will require investments in equity securities to be measured at fair value with changes in fair value reported in net income except for those equity securities that result in consolidation or are accounted for under the equity method of accounting. The new guidance will also require a deferred tax asset resulting from net unrealized losses on available-for-sale fixed maturities that are recognized in accumulated other comprehensive income ("OCI") to be evaluated for recoverability in combination with the Company's other deferred tax assets. Under existing guidance, the Company measures investments in equity securities, available-for-sale, at fair value with changes in fair value reported in OCI. As required, the Company will adopt the guidance effective January 1, 2018 through a cumulative effect adjustment to retained earnings. Early adoption is not allowed. The impact to the Company will be increased volatility in net income beginning in 2018. Any difference in the evaluation of deferred tax assets may also affect stockholders equity. Cash flows will not be affected. The impact will depend on the composition of the Company's investment portfolio in the future and changes in fair value of the Company's investments. As of December 31, 2015, equity securities available-for-sale totaled \$178 , with no unrealized gains or losses in accumulated OCI. Had the new accounting guidance been in place since the beginning of 2015, the Company would have recognized mark-to-market unrealized losses of \$6 after-tax in net income for the year ended December 31, 2015.

Consolidation

The FASB issued updated consolidation guidance. The updates revise existing guidance for when to consolidate VIEs and general partners' investments in limited partnerships, end the deferral granted for applying the VIE guidance to certain investment companies, and reduce the number of circumstances where a decision maker's or service provider's fee arrangement is deemed to be a variable interest in an entity. The updates also modify consolidation guidance for determining whether limited partnerships are VIEs or voting interest entities. This guidance is effective January 1, 2016, and may be applied fully retrospectively or through a cumulative effect adjustment to retained earnings as of the adoption (modified retrospective approach). The Company will adopt the guidance using a modified retrospective approach effective as of January 1, 2016 and in the first quarter of 2016 will increase invested assets and other liabilities by an equal amount of less than \$80 , with no impact to net income, equity, or cash flows.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

Revenue Recognition

The FASB issued updated guidance for recognizing revenue. The guidance excludes insurance contracts and financial instruments. Revenue is to be recognized when, or as, goods or services are transferred to customers in an amount that reflects the consideration that an entity is expected to be entitled in exchange for those goods or services, and this accounting guidance is similar to current accounting for many transactions. This guidance is effective retrospectively on January 1, 2018, with a choice of restating prior periods or recognizing a cumulative effect for contracts in place as of the adoption. Early adoption is permitted as of January 1, 2017. The Company has not yet determined its method for adoption or estimated the effect of the adoption on the Company's Consolidated Financial Statements.

Significant Accounting Policies

The Company's significant accounting policies are as follows:

Segment Information

The Company has no reportable segments and is comprised of the run-off operations of annuity, and institutional and private-placement life insurance businesses. See Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements for further discussion of life and annuity businesses sold. The Company's determination that it has no reportable segments is based on the fact that the Company's chief operating decision maker reviews the Company's financial performance at a consolidated level.

Revenue Recognition

For investment and universal life-type contracts, the amounts collected from policyholders are considered deposits and are not included in revenue. Fee income for variable annuity and other universal life-type contracts consists of policy charges for policy administration, cost of insurance charges and surrender charges assessed against policyholders' account balances and are recognized in the period in which services are provided. For the Company's traditional life and group disability products premiums are recognized as revenue when due from policyholders.

Income Taxes

The Company recognizes taxes payable or refundable for the current year and deferred taxes for the tax consequences of temporary differences between the financial reporting and tax basis of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years the temporary differences are expected to reverse. A deferred tax provision is recorded for the tax effects of differences between the Company's current taxable income and its income before tax under generally accepted accounting principles in the Consolidated Statements of Operations. For deferred tax assets, the Company records a valuation allowance that is adequate to reduce the total deferred tax asset to an amount that will more likely than not be realized.

The Company is included in The Hartford's consolidated U.S. Federal income tax return. The Company and The Hartford have entered into a tax sharing agreement under which each member in the consolidated U.S. Federal income tax return will make payments between them such that, with respect to any period, the amount of taxes to be paid by the Company, subject to certain tax adjustments, is consistent with the "parent down" approach. Under this approach, the Company's deferred tax assets and tax attributes are considered realized by it so long as the group is able to recognize (or currently use) the related deferred tax asset or attribute. Thus the need for a valuation allowance is determined at the consolidated return level rather than at the level of the individual entities comprising the consolidated group.

Dividends to Policyholders

Policyholder dividends are paid to certain life insurance policyholders. Policies that receive dividends are referred to as participating policies. Participating dividends to policyholders are accrued and reported in other liabilities using an estimate of the amount to be paid based on underlying contractual obligations under policies and applicable state laws.

There were no additional amounts of income allocated to participating policyholders. If limitations exist on the amount of net income from participating life insurance contracts that may be distributed to stockholders, the policyholder's share of net income on those contracts that cannot be distributed is excluded from stockholder's equity by a charge to operations and an increase to a liability.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

Investments

Overview

The Company's investments in fixed maturities include bonds, structured securities, redeemable preferred stock and commercial paper. Most of these investments, along with certain equity securities, which include common and non-redeemable preferred stocks, are classified as available-for-sale ("AFS") and are carried at fair value. The after-tax difference between fair value and cost or amortized cost is reflected in stockholders' equity as a component of Accumulated Other Comprehensive Income (Loss) ("AOCI"), after adjustments for the effect of deducting certain life and annuity deferred policy acquisition costs and reserve adjustments. Also included in equity securities, AFS are certain equity securities for which the Company elected the fair value option. These equity securities are carried at fair value with changes in value recorded in realized capital gains and losses. Fixed maturities for which the Company elected the fair value option are classified as FVO and are carried at fair value with changes in value recorded in realized capital gains and losses on the Company's Consolidated Statements of Operations. Policy loans are carried at outstanding balance. Mortgage loans are recorded at the outstanding principal balance adjusted for amortization of premiums or discounts and net of valuation allowances. Short-term investments are carried at amortized cost, which approximates fair value. Limited partnerships and other alternative investments are reported at their carrying value and accounted for under the equity method with the Company's share of earnings included in net investment income. Recognition of income related to limited partnerships and other alternative investments is delayed due to the availability of the related financial information, as private equity and other funds are generally on a three-month delay and hedge funds on a one-month delay. Accordingly, income for the years ended December 31, 2015, 2014 and 2013 may not include the full impact of current year changes in valuation of the underlying assets and liabilities of the funds, which are generally obtained from the limited partnerships and other alternative investments' general partners. Other investments primarily consist of derivative instruments which are carried at fair value.

Net Realized Capital Gains and Losses

Net realized capital gains and losses from investment sales are reported as a component of revenues and are determined on a specific identification basis. Net realized capital gains and losses also result from fair value changes in fixed maturities and equity securities for which the fair value option was elected, and derivatives contracts (both free-standing and embedded) that do not qualify or are not designated as a hedge for accounting purposes, ineffectiveness on derivatives that qualify for hedge accounting treatment, and the change in value of derivatives in certain fair-value hedge relationships and their associated hedged asset. Impairments and mortgage loan valuation allowances are recognized as net realized capital losses in accordance with the Company's impairment and mortgage loan valuation allowance policies as discussed in Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements. Foreign currency transaction remeasurements are also included in net realized capital gains and losses.

Net Investment Income

Interest income from fixed maturities and mortgage loans is recognized when earned on the constant effective yield method based on estimated timing of cash flows. The amortization of premium and accretion of discount for fixed maturities also takes into consideration call and maturity dates that produce the lowest yield. For securitized financial assets subject to prepayment risk, yields are recalculated and adjusted periodically to reflect historical and/or estimated future repayments using the retrospective method; however, if these investments are impaired, any yield adjustments are made using the prospective method. Prepayment fees and make-whole payments on fixed maturities and mortgage loans are recorded in net investment income when earned. For equity securities, dividends will be recognized as investment income on the ex-dividend date. Limited partnerships and other alternative investments primarily use the equity method of accounting to recognize the Company's share of earnings. For impaired debt securities, the Company accretes the new cost basis to the estimated future cash flows over the expected remaining life of the security by prospectively adjusting the security's yield, if necessary. The Company's non-income producing investments were not material for the years ended December 31, 2015, 2014 and 2013.

Derivative Instruments

Overview

The Company utilizes a variety of over-the-counter ("OTC") derivative investments, including transactions cleared through a central clearing house ("OTC-cleared"), and exchange-traded derivative instruments as part of its overall risk management strategy. The types of instruments may include swaps, caps, floors, forwards, futures and options to achieve one of four Company-approved objectives: to hedge risk arising from interest rate, equity market, commodity market, credit spread and issuer default, price or currency exchange rate risk or volatility; to manage liquidity; to control transaction costs; or to enter into synthetic replication transactions.

Interest rate, volatility, dividend, credit default and index swaps involve the periodic exchange of cash flows with other parties, at specified intervals, calculated using agreed upon rates or other financial variables and notional principal amounts. Generally, little to no cash or principal payments are exchanged at the inception of the contract. Typically, at the time a swap is entered into, the cash flow streams exchanged by the counterparties are equal in value.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

Interest rate cap and floor contracts entitle the purchaser to receive from the issuer at specified dates, the amount, if any, by which a specified market rate exceeds the cap strike interest rate or falls below the floor strike interest rate, applied to a notional principal amount. A premium payment is made by the purchaser of the contract at its inception and no principal payments are exchanged.

Forward contracts are customized commitments that specify a rate of interest or currency exchange rate to be paid or received on an obligation beginning on a future start date and are typically settled in cash.

Financial futures are standardized commitments to either purchase or sell designated financial instruments, at a future date, for a specified price and may be settled in cash or through delivery of the underlying instrument. Futures contracts trade on organized exchanges. Margin requirements for futures are met by pledging securities or cash, and changes in the futures' contract values are settled daily in cash.

Option contracts grant the purchaser, for a premium payment, the right to either purchase from or sell to the issuer a financial instrument at a specified price, within a specified period or on a stated date. The contracts may reference commodities, which grant the purchaser the right to either purchase from or sell to the issuer commodities at a specified price, within a specified period or on a stated date. Option contracts are typically settled in cash.

Foreign currency swaps exchange an initial principal amount in two currencies, agreeing to re-exchange the currencies at a future date, at an agreed upon exchange rate. There may also be a periodic exchange of payments at specified intervals calculated using the agreed upon rates and exchanged principal amounts.

The Company's derivative transactions conducted in insurance company subsidiaries are used in strategies permitted under the derivative use plans required by the State of Connecticut and the State of New York insurance departments.

Accounting and Financial Statement Presentation of Derivative Instruments and Hedging Activities

Derivative instruments are recognized on the Consolidated Balance Sheets at fair value and are reported in Other Investments and Other Liabilities. For balance sheet presentation purposes, the Company has elected to offset the fair value amounts, income accruals, and related cash collateral receivables and payables of OTC derivative instruments executed in a legal entity and with the same counterparty or under a master netting agreement, which provides the Company with the legal right of offset.

The Company also clears interest rate swap and certain credit default swap derivative transactions through central clearing houses. OTC-cleared derivatives require initial collateral at the inception of the trade in the form of cash or highly liquid collateral, such as U.S. Treasuries and government agency investments. Central clearing houses also require additional cash collateral as variation margin based on daily market value movements. For information on collateral, see the derivative collateral arrangements section in Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements. In addition, OTC-cleared transactions include price alignment interest either received or paid on the variation margin, which is reflected in net investment income. The Company has also elected to offset the fair value amounts, income accruals and related cash collateral receivables and payables of OTC-cleared derivative instruments based on clearing house agreements.

On the date the derivative contract is entered into, the Company designates the derivative as (1) a hedge of the fair value of a recognized asset or liability ("fair value" hedge), (2) a hedge of the variability in cash flows of a forecasted transaction or of amounts to be received or paid related to a recognized asset or liability ("cash flow" hedge), (3) a hedge of a net investment in a foreign operation ("net investment" hedge) or (4) held for other investment and/or risk management purposes, which primarily involve managing asset or liability related risks and do not qualify for hedge accounting.

Fair Value Hedges

Changes in the fair value of a derivative that is designated and qualifies as a fair value hedge, including foreign-currency fair value hedges, along with the changes in the fair value of the hedged asset or liability that is attributable to the hedged risk, are recorded in current period earnings as net realized capital gains and losses with any differences between the net change in fair value of the derivative and the hedged item representing the hedge ineffectiveness. Periodic cash flows and accruals of income/expense ("periodic derivative net coupon settlements") are recorded in the line item of the Consolidated Statements of Operations in which the cash flows of the hedged item are recorded.

Cash Flow Hedges

Changes in the fair value of a derivative that is designated and qualifies as a cash flow hedge, including foreign-currency cash flow hedges, are recorded in AOCI and are reclassified into earnings when the variability of the cash flow of the hedged item impacts earnings. Gains and losses on derivative contracts that are reclassified from AOCI to current period earnings are included in the line item in the Consolidated Statements of Operations in which the cash flows of the hedged item are recorded. Any hedge ineffectiveness is recorded immediately in current period earnings as net realized capital gains and losses. Periodic derivative net coupon settlements are recorded in the line item of the Consolidated Statements of Operations in which the cash flows of the hedged item are recorded.

1. Basis of Presentation and Significant Accounting Policies (continued)

Net Investment in a Foreign Operation Hedges

Changes in fair value of a derivative used as a hedge of a net investment in a foreign operation, to the extent effective as a hedge, are recorded in the foreign currency translation adjustments account within AOCI. Cumulative changes in fair value recorded in AOCI are reclassified into earnings upon the sale or complete, or substantially complete, liquidation of the foreign entity. Any hedge ineffectiveness is recorded immediately in current period earnings as net realized capital gains and losses. Periodic derivative net coupon settlements are recorded in the line item of the Consolidated Statements of Operations in which the cash flows of the hedged item are recorded.

Other Investment and/or Risk Management Activities

The Company's other investment and/or risk management activities primarily relate to strategies used to reduce economic risk or replicate permitted investments and do not receive hedge accounting treatment. Changes in the fair value, including periodic derivative net coupon settlements, of derivative instruments held for other investment and/or risk management purposes are reported in current period earnings as net realized capital gains and losses.

Hedge Documentation and Effectiveness Testing

To qualify for hedge accounting treatment, a derivative must be highly effective in mitigating the designated changes in fair value or cash flow of the hedged item. At hedge inception, the Company formally documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking each hedge transaction. The documentation process includes linking derivatives that are designated as fair value, cash flow, or net investment hedges to specific assets or liabilities on the balance sheet or to specific forecasted transactions and defining the effectiveness and ineffectiveness testing methods to be used. The Company also formally assesses both at the hedge's inception and ongoing on a quarterly basis, whether the derivatives that are used in hedging transactions have been and are expected to continue to be highly effective in offsetting changes in fair values, cash flows or net investment in foreign operations of hedged items. Hedge effectiveness is assessed primarily using quantitative methods as well as using qualitative methods. Quantitative methods include regression or other statistical analysis of changes in fair value or cash flows associated with the hedge relationship. Qualitative methods may include comparison of critical terms of the derivative to the hedged item. Hedge ineffectiveness of the hedge relationships are measured each reporting period using the "Change in Variable Cash Flows Method", the "Change in Fair Value Method", the "Hypothetical Derivative Method", or the "Dollar Offset Method".

Discontinuance of Hedge Accounting

The Company discontinues hedge accounting prospectively when (1) it is determined that the qualifying criteria are no longer met; (2) the derivative is no longer designated as a hedging instrument; or (3) the derivative expires or is sold, terminated or exercised.

When hedge accounting is discontinued because it is determined that the derivative no longer qualifies as an effective fair value hedge, the derivative continues to be carried at fair value on the balance sheet with changes in its fair value recognized in current period earnings. Changes in the fair value of the hedged item attributable to the hedged risk is no longer adjusted through current period earnings and the existing basis adjustment is amortized to earnings over the remaining life of the hedged item through the applicable earnings component associated with the hedged item.

When hedge accounting is discontinued because the Company becomes aware that it is not probable that the forecasted transaction will occur, the derivative continues to be carried on the balance sheet at its fair value, and gains and losses that were accumulated in AOCI are recognized immediately in earnings.

In other situations in which hedge accounting is discontinued, including those where the derivative is sold, terminated or exercised, amounts previously deferred in AOCI are reclassified into earnings when earnings are impacted by the the hedged item.

Embedded Derivatives

The Company purchases and has previously issued financial instruments and products that contain embedded derivative instruments. When it is determined that (1) the embedded derivative 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 derivative is bifurcated from the host for measurement purposes. The embedded derivative, which is reported with the host instrument in the Consolidated Balance Sheets, is carried at fair value with changes in fair value reported in net realized capital gains and losses.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

Credit Risk

Credit risk is defined as the risk of financial loss due to uncertainty of an obligor's or counterparty's ability or willingness to meet its obligations in accordance with agreed upon terms. Credit exposures are measured using the market value of the derivatives, resulting in amounts owed to the Company by its counterparties or potential payment obligations from the Company to its counterparties. The Company generally requires that OTC derivative contracts, other than certain forward contracts, be governed by International Swaps and Derivatives Association ("ISDA") agreements which are structured by legal entity and by counterparty, and permit right of offset. These agreements require daily collateral settlement based upon agreed upon thresholds. For purposes of daily derivative collateral maintenance, credit exposures are generally quantified based on the prior business day's market value and collateral is pledged to and held by, or on behalf of, the Company to the extent the current value of the derivatives exceed the contractual thresholds. For the Company's domestic derivative programs, the maximum uncollateralized threshold for a derivative counterparty for a single legal entity is \$10. The Company also minimizes the credit risk of derivative instruments by entering into transactions with high quality counterparties primarily rated A or better, which are monitored and evaluated by the Company's risk management team and reviewed by senior management. OTC-cleared derivatives are governed by clearing house rules. Transactions cleared through a central clearing house reduce risk due to their ability to require daily variation margin, monitor the Company's ability to request additional collateral in the event of a counterparty downgrade, and act as an independent valuation source. In addition, the Company monitors counterparty credit exposure on a monthly basis to ensure compliance with Company policies and statutory limitations.

Cash

Cash represents cash on hand and demand deposits with banks or other financial institutions.

Reinsurance

The Company cedes insurance to affiliated and unaffiliated insurers in order to limit its maximum losses and to diversify its exposures and provide statutory surplus relief. Such arrangements do not relieve the Company of its primary liability to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company. The Company also assumes reinsurance from other insurers.

Reinsurance accounting is followed for ceded and assumed transactions that provide indemnification against loss or liability relating to insurance risk (i.e. risk transfer). To meet risk transfer requirements, a reinsurance agreement must include insurance risk, consisting of underwriting, investment, and timing risk, and a reasonable possibility of a significant loss to the reinsurer. If the ceded and assumed transactions do not meet risk transfer requirements, the Company accounts for these transactions as financing transactions.

Premiums, benefits, losses and loss adjustment expenses reflect the net effects of ceded and assumed reinsurance transactions. Included in other assets are prepaid reinsurance premiums, which represent the portion of premiums ceded to reinsurers applicable to the unexpired terms of the reinsurance agreements. Included in reinsurance recoverables are balances due from reinsurance companies for paid and unpaid losses and loss adjustment expenses and are presented net of any necessary allowance for uncollectible reinsurance.

The Company reinsures certain of its risks to other reinsurers under yearly renewable term, coinsurance, and modified coinsurance arrangements, and variations thereof. The cost of reinsurance related to long-duration contracts is accounted for over the life of the underlying reinsured policies using assumptions consistent with those used to account for the underlying policies.

The Company evaluates the financial condition of its reinsurers and concentrations of credit risk. Reinsurance is placed with reinsurers that meet strict financial criteria established by the Company. The Company entered into two reinsurance transactions upon completion of the sales of its Retirement Plans and Individual Life businesses in 2013. For further discussion of these transactions, see Note 4 - Reinsurance and Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

Deferred Policy Acquisition Costs

Deferred policy acquisition costs ("DAC") represent costs that are directly related to the acquisition of new and renewal insurance contracts and incremental direct costs of contract acquisition that are incurred in transactions with either independent third parties or employees. Such costs primarily include commissions, premium taxes, costs of policy issuance and underwriting, and certain other expenses that are directly related to successfully issued contracts.

For life insurance products, the DAC asset related to most universal life-type contracts (including variable annuities) is amortized over the estimated life of the contracts acquired in proportion to the present value of estimated gross profits ("EGPs"). EGPs are also used to amortize other assets and liabilities in the Company's Consolidated Balance Sheets such as sales inducement assets ("SIA"). Components of EGPs are also used to determine reserves for universal life type contracts (including variable annuities) with death or other insurance benefits such as guaranteed minimum death, life-contingent guaranteed minimum withdrawal and universal life insurance secondary guarantee benefits. These benefits are accounted for and collectively referred to as death and other insurance benefit reserves and are held in addition to the account value liability representing policyholder funds.

1. Basis of Presentation and Significant Accounting Policies (continued)

For most life insurance product contracts, including variable annuities, the Company estimates gross profits over 20 years as EGPs emerging subsequent to that timeframe are immaterial. Products sold in a particular year are aggregated into cohorts. Future gross profits for each cohort are projected over the estimated lives of the underlying contracts, based on future account value projections for variable annuity and variable universal life products. The projection of future account values requires the use of certain assumptions including: separate account returns; separate account fund mix; fees assessed against the contract holder's account balance; full surrender and partial withdrawal rates; interest margin; mortality; and the extent and duration of hedging activities and hedging costs.

The Company determines EGPs from a single deterministic reversion to mean ("RTM") separate account return projection which is an estimation technique commonly used by insurance entities to project future separate account returns. Through this estimation technique, the Company's DAC model is adjusted to reflect actual account values at the end of each quarter. Through a consideration of recent market returns, the Company will unlock ("Unlock"), or adjust, projected returns over a future period so that the account value returns to the long-term expected rate of return, providing that those projected returns do not exceed certain caps. This Unlock for future separate account returns is determined each quarter.

In the fourth quarter of 2015, the Company completed a comprehensive policyholder behavior assumption study which resulted in a non-market related after-tax expense and incorporated the results of that study into its projection of future gross profits. Additionally, throughout the year, the Company evaluates various aspects of policyholder behavior and will revise its policyholder assumptions if credible emerging data indicates that changes are warranted. The Company will continue to evaluate its assumptions related to policyholder behavior as initiatives to reduce the size of the variable annuity business are implemented by management. Upon completion of an annual assumption study or evaluation of credible new information, the Company will revise its assumptions to reflect its current best estimate. These assumption revisions will change the projected account values and the related EGPs in the DAC, and SIA amortization models, as well as, the death and other insurance benefit reserving models.

All assumption changes that affect the estimate of future EGPs including the update of current account values, the use of the RTM estimation technique, and policyholder behavior assumptions are considered an Unlock in the period of revision. An Unlock adjusts the DAC, SIA, and death and other insurance benefit reserve balances in the Consolidated Balance Sheets with an offsetting benefit or charge in the Consolidated Statements of Operations in the period of the revision. An Unlock revises EGPs to reflect the Company's current best estimate assumptions. The Company also tests the aggregate recoverability of DAC by comparing the existing DAC balance to the present value of future EGPs. An Unlock that results in an after-tax benefit generally occurs as a result of actual experience or future expectations of product profitability being favorable compared to previous estimates. An Unlock that results in an after-tax charge generally occurs as a result of actual experience or future expectations of product profitability being unfavorable compared to previous estimates.

Separate Accounts, Death Benefits and Other Insurance Benefit Features

The Company records the variable account value portion of variable annuity and variable life insurance products and institutional and governmental investment contracts within separate accounts. Separate account assets are reported at fair value and separate account liabilities are reported at amounts consistent with separate account assets. Investment income and gains and losses from those separate account assets accrue directly to the policyholder, who assumes the related investment risk, and are offset by change in the related liability with changes reported in the same line item in the Consolidated Statements of Operations. The Company earns fees for investment management, certain administrative expenses, and mortality and expense risks assumed which are reported in fee income.

Certain contracts classified as universal life-type include death and other insurance benefit features including guaranteed minimum death benefit ("GMDB"), guaranteed minimum income benefit ("GMIB") and guaranteed minimum withdrawal benefit ("GMWB") riders offered with variable annuity contracts, or secondary guarantee benefits offered with universal life insurance contracts. GMWBs that represent embedded derivatives are accounted for at fair value. Universal life insurance secondary guarantee benefits ensure that the policy will not terminate, and will continue to provide a death benefit, even if there is insufficient policy value to cover the monthly deductions and charges. For the Company's GMWB products, the withdrawal benefit can exceed the guaranteed remaining balance ("GRB"), which is generally equal to premiums less withdrawals. These GMDBs, GMIBs, the life-contingent portion of the GMWBs and the universal life insurance secondary guarantees require an additional liability to be held above the account value liability representing the policyholders' funds. This liability is reported in reserve for future policy benefits in the Company's Consolidated Balance Sheets. Changes in the death and other insurance benefit reserves are recorded in benefits, losses and loss adjustment expenses in the Company's Consolidated Statements of Operations.

The death and other insurance benefit liability is determined by estimating the expected present value of the benefits in excess of the policyholder's expected account value in proportion to the present value of total expected fees. The liability is accrued as actual fees are earned. The expected present value of benefits and fees are generally derived from a set of stochastic scenarios, that have been calibrated to our RTM separate account returns, and assumptions including market rates of return, volatility, discount rates, lapse rates and mortality experience. Consistent with the Company's policy on the Unlock, the Company regularly evaluates estimates used and adjusts the additional liability balance, with a related charge or credit to benefits, losses and loss adjustment expense. For further information on the Unlock, see the Deferred Policy Acquisition Costs accounting policy section within this footnote.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. Basis of Presentation and Significant Accounting Policies (continued)

The Company reinsures a portion of its in-force GMDB and all of its universal life insurance secondary guarantees and net reinsurance costs are recognized ratably over the accumulation period based on total expected assessments.

Reserve for Future Policy Benefits and Unpaid Losses and Loss Adjustment Expenses

Liabilities for the Company's group life and disability contracts as well its individual term life insurance policies include amounts for unpaid losses and future policy benefits. Liabilities for unpaid losses include estimates of amounts to fully settle known reported claims as well as claims related to insured events that the Company estimates have been incurred but have not yet been reported. Liabilities for future policy benefits are calculated by the net level premium method using interest, withdrawal and mortality assumptions appropriate at the time the policies were issued. The methods used in determining the liability for unpaid losses and future policy benefits are standard actuarial methods. For the tabular reserves, discount rates are based on the Company's earned investment yield and the morbidity/mortality tables used are standard industry tables modified to reflect the Company's actual experience when appropriate. These reserves are computed such that they are expected to meet the Company's future policy obligations. Future policy benefits are computed at amounts that, with additions from estimated premiums to be received and with interest on such reserves compounded annually at certain assumed rates, are expected to be sufficient to meet the Company's policy obligations at their maturities or in the event of an insured's death. Changes in or deviations from the assumptions used for mortality, morbidity, expected future premiums and interest can significantly affect the Company's reserve levels and related future operations.

Other Policyholder Funds and Benefits Payable

Other policyholder funds and benefits payable consist of non-variable account values associated with variable annuity and other universal life-type contracts and investment contracts.

Investment contracts consist of institutional and governmental products, without life contingencies, including funding agreements, certain structured settlements and guaranteed investment contracts. The liability for investment contracts is equal to the balance that accrues to the benefit of the contract holder as of the financial statement date, which includes the accumulation of deposits plus credited interest, less withdrawals and amounts assessed through the financial statement date.

Foreign Currency

Foreign currency translation gains and losses are reflected in stockholder's equity as a component of accumulated other comprehensive income (loss). The Company's foreign subsidiaries' balance sheet accounts are translated at the exchange rates in effect at each year end and income statement accounts are translated at the average rates of exchange prevailing during the year. The national currencies of the international operations are generally their functional currencies. Gains and losses resulting from the remeasurement of foreign currency transactions are reflected in earnings in realized capital gains (losses) in the period in which they occur.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements

Fair value is determined based on the "exit price" notion which is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Financial instruments carried at fair value in the Company's Consolidated Financial Statements include fixed maturity and equity securities, AFS; fixed maturities and equity securities, FVO; short-term investments; freestanding and embedded derivatives; certain limited partnerships and other alternative investments; separate account assets and certain other liabilities. The Company's estimates of fair value for financial assets and financial liabilities are based on the framework established in the fair value accounting guidance. The framework is based on the inputs used in valuation, gives the highest priority to quoted prices in active markets and requires that observable inputs be used in the valuations when available. The Company categorizes its assets and liabilities measured at estimated fair value based on whether the significant inputs into the valuation are observable. The fair value hierarchy categorizes the inputs in the valuation techniques used to measure fair value into three broad Levels (Level 1, 2 or 3).

- Level 1 Unadjusted quoted prices for identical assets, or liabilities, in active markets that the Company has the ability to access at the measurement date.
- Level 2 Observable inputs, other than quoted prices included in Level 1, for the asset or liability, or prices for similar assets and liabilities.
- Level 3 Valuations that are derived from techniques in which one or more of the significant inputs are unobservable (including assumptions about risk). Because Level 3 fair values, by their nature, contain one or more significant unobservable inputs, as there is little or no observable market for these assets and liabilities, considerable judgment is used to determine the Level 3 fair values. Level 3 fair values represent the Company's best estimate of an amount that could be realized in a current market exchange absent actual market exchanges.

In many situations, inputs used to measure the fair value of an asset or liability position may fall into different levels of the fair value hierarchy. In these situations, the Company will determine the level in which the fair value falls based upon the lowest level input that is significant to the determination of the fair value. In most cases, both observable (e.g., changes in interest rates) and unobservable (e.g., changes in risk assumptions) inputs are used in the determination of fair values that the Company has classified within Level 3. Consequently, these values and the related gains and losses are based upon both observable and unobservable inputs. The Company's fixed maturities included in Level 3 are classified as such because these securities are primarily within illiquid markets and/or priced by independent brokers.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

The following tables present assets and (liabilities) carried at fair value by hierarchy level.

| | December 31, 2015 | | | |
|---|-------------------|---|---|---|
| | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| Assets accounted for at fair value on a recurring basis | | | | |
| Fixed maturities, AFS | | | | |
| Asset backed securities ("ABS") | \$ 846 | \$ — | \$ 841 | \$ 5 |
| Collateralized debt obligations ("CDOs") | 1,408 | — | 1,078 | 330 |
| Commercial mortgage-backed securities ("CMBS") | 1,964 | — | 1,902 | 62 |
| Corporate | 15,175 | — | 14,641 | 534 |
| Foreign government/government agencies | 331 | — | 314 | 17 |
| States, municipalities and political subdivisions ("Municipal") | 1,132 | — | 1,083 | 49 |
| Residential mortgage-backed securities ("RMBS") | 1,503 | — | 875 | 628 |
| U.S. Treasuries | 2,298 | 123 | 2,175 | — |
| Total fixed maturities | 24,657 | 123 | 22,909 | 1,625 |
| Fixed maturities, FVO | 165 | 1 | 162 | 2 |
| Equity securities, trading [1] | 11 | 11 | — | — |
| Equity securities, AFS | 459 | 396 | 25 | 38 |
| Derivative assets | | | | |
| Credit derivatives | 7 | — | 7 | — |
| Foreign exchange derivatives | 4 | — | 4 | — |
| Interest rate derivatives | 54 | — | 54 | — |
| GMWB hedging instruments | 111 | — | 27 | 84 |
| Macro hedge program | 74 | — | — | 74 |
| Total derivative assets [2] | 250 | — | 92 | 158 |
| Short-term investments | 572 | 131 | 441 | — |
| Reinsurance recoverable for GMWB | 83 | — | — | 83 |
| Modified coinsurance reinsurance contracts | 79 | — | 79 | — |
| Separate account assets [3] | 118,163 | 78,099 | 39,559 | 505 |
| Total assets accounted for at fair value on a recurring basis | \$ 144,439 | \$ 78,761 | \$ 63,267 | \$ 2,411 |
| Liabilities accounted for at fair value on a recurring basis | | | | |
| Other policyholder funds and benefits payable | | | | |
| GMWB | \$ (262) | \$ — | \$ — | \$ (262) |
| Equity linked notes | (26) | — | — | (26) |
| Total other policyholder funds and benefits payable | (288) | — | — | (288) |
| Derivative liabilities | | | | |
| Credit derivatives | (7) | — | (7) | — |
| Equity derivatives | 41 | — | 41 | — |
| Foreign exchange derivatives | (376) | — | (376) | — |
| Interest rate derivatives | (431) | — | (402) | (29) |
| GMWB hedging instruments | 47 | — | (4) | 51 |
| Macro hedge program | 73 | — | — | 73 |
| Total derivative liabilities [4] | (653) | — | (748) | 95 |
| Total liabilities accounted for at fair value on a recurring basis | \$ (941) | \$ — | \$ (748) | \$ (193) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

| | December 31, 2014 | | | |
|---|-------------------|---|---|---|
| | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| Assets accounted for at fair value on a recurring basis | | | | |
| Fixed maturities, AFS | | | | |
| ABS | \$ 1,171 | \$ — | \$ 1,089 | \$ 82 |
| CDOs | 1,148 | — | 788 | 360 |
| CMBS | 1,887 | — | 1,768 | 119 |
| Corporate | 15,742 | — | 15,096 | 646 |
| Foreign government/government agencies | 602 | — | 572 | 30 |
| Municipal | 1,052 | — | 998 | 54 |
| RMBS | 1,857 | — | 1,123 | 734 |
| U.S. Treasuries | 1,977 | 72 | 1,905 | — |
| Total fixed maturities | 25,436 | 72 | 23,339 | 2,025 |
| Fixed maturities, FVO | 280 | — | 196 | 84 |
| Equity securities, trading [1] | 11 | 11 | — | — |
| Equity securities, AFS | 514 | 411 | 55 | 48 |
| Derivative assets | | | | |
| Credit derivatives | 3 | — | 5 | (2) |
| Equity derivatives | 2 | — | — | 2 |
| Foreign exchange derivatives | (1) | — | (1) | — |
| Interest rate derivatives | 123 | — | 123 | — |
| GMWB hedging instruments | 119 | — | 5 | 114 |
| Macro hedge program | 93 | — | — | 93 |
| Total derivative assets [2] | 339 | — | 132 | 207 |
| Short-term investments | 2,162 | 199 | 1,963 | — |
| Reinsurance recoverable for GMWB | 56 | — | — | 56 |
| Modified coinsurance reinsurance contracts | 34 | — | 34 | — |
| Separate account assets [3] | 132,198 | 91,524 | 40,096 | 578 |
| Total assets accounted for at fair value on a recurring basis | \$ 161,030 | \$ 92,217 | \$ 65,815 | \$ 2,998 |
| Liabilities accounted for at fair value on a recurring basis | | | | |
| Other policyholder funds and benefits payable | | | | |
| GMWB | \$ (139) | \$ — | \$ — | \$ (139) |
| Equity linked notes | (26) | — | — | (26) |
| Total other policyholder funds and benefits payable | (165) | — | — | (165) |
| Derivative liabilities | | | | |
| Credit derivatives | — | — | 1 | (1) |
| Equity derivatives | 28 | — | 25 | 3 |
| Foreign exchange derivatives | (444) | — | (444) | — |
| Interest rate derivatives | (409) | — | (382) | (27) |
| GMWB hedging instruments | 55 | — | (1) | 56 |
| Macro hedge program | 48 | — | — | 48 |
| Total derivative liabilities [4] | (722) | — | (801) | 79 |
| Consumer notes [5] | (3) | — | — | (3) |
| Total liabilities accounted for at fair value on a recurring basis | \$ (890) | \$ — | \$ (801) | \$ (89) |

[1] Included in other investments on the Consolidated Balance Sheets.

[2] Includes OTC and OTC-cleared derivative instruments in a net positive fair value position after consideration of the accrued interest and impact of collateral posting requirements which may be imposed by agreements, clearing house rules, and applicable law. As of December 31, 2015 and December 31, 2014, \$271 and \$399, respectively, of cash collateral liability was netted against the derivative asset value in the Consolidated Balance Sheets and is excluded from the preceding table. See footnote 4 for derivative liabilities.

[3] Approximately \$1.8 billion and \$2.5 billion of investment sales receivable, as of December 31, 2015 and 2014, respectively, are excluded from this disclosure requirement

because they are trade receivables in the ordinary course of business where the carrying amount approximates fair value.

[4] Includes OTC and OTC-cleared derivative instruments in a net negative fair market value position (derivative liability) after consideration of the accrued interest and impact of collateral posting requirements which may be imposed by agreements, clearing house rules and applicable law. In the following Level 3 roll forward table in this Note 2, the derivative assets and liabilities are referred to as "freestanding derivatives" and are presented on a net basis.

[5] Represents embedded derivatives associated with non-funding agreement-backed consumer equity-linked notes.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

Valuation Techniques, Procedures and Controls

The Company determines the fair values of certain financial assets and liabilities based on quoted market prices where available and where prices represent a reasonable estimate of fair value. The Company also determines fair value based on future cash flows discounted at the appropriate current market rate. Fair values reflect adjustments for counterparty credit quality, the Company's default spreads, liquidity and, where appropriate, risk margins on unobservable parameters.

The fair value process is monitored by the Valuation Committee, which is a cross-functional group of senior management within the Company that meets at least quarterly. The Valuation Committee is co-chaired by the Heads of Investment Operations and Accounting, and has representation from various investment sector professionals, accounting, operations, legal, compliance and risk management. The purpose of the committee is to oversee the pricing policy and procedures by ensuring objective and reliable valuation practices and pricing of financial instruments, as well as addressing valuation issues and approving changes to valuation methodologies and pricing sources. There are also two working groups under the Valuation Committee, a Securities Fair Value Working Group ("Securities Working Group") and a Derivatives Fair Value Working Group ("Derivatives Working Group"), which include various investment, operations, accounting and risk management professionals that meet monthly to review market data trends, pricing and trading statistics and results, and any proposed pricing methodology changes.

The Company also has an enterprise-wide Operational Risk Management function, led by the Chief Operational Risk Officer, which is responsible for establishing, maintaining and communicating the framework, principles and guidelines of the Company's operational risk management program. This includes model risk management which provides an independent review of the suitability, characteristics and reliability of model inputs; as well as, an analysis of significant changes to current models.

Fixed Maturities, Equity Securities, and Short-term Investments

The fair value of fixed maturities, equity securities, and short-term investments in an active and orderly market (e.g., not distressed or forced liquidation) are determined by management using a "waterfall" approach after considering the following pricing sources: quoted prices for identical assets or liabilities, prices from third-party pricing services, independent broker quotations, or internal matrix pricing processes. Typical inputs used by these pricing sources include, but are not limited to, benchmark yields, reported trades, broker/dealer quotes, issuer spreads, benchmark securities, bids, offers, and/or estimated cash flows, prepayment speeds, and default rates. Most fixed maturities do not trade daily. Based on the typical trading volumes and the lack of quoted market prices for fixed maturities, third-party pricing services utilize matrix pricing to derive security prices. Matrix pricing relies on securities' relationships to other benchmark quoted securities, which trade more frequently. Pricing services utilize recently reported trades of identical or similar securities making adjustments through the reporting date based on the preceding outlined available market observable information. If there are no recently reported trades, the third-party pricing services may develop a security price using expected future cash flows based upon collateral performance and discounted at an estimated market rate. Both matrix pricing and discounted cash flow techniques develop prices by factoring in the time value for cash flows and risk, including liquidity and credit.

Prices from third-party pricing services may be unavailable for securities that are rarely traded or are traded only in privately negotiated transactions. As a result, certain securities are priced via independent broker quotations which utilize inputs that may be difficult to corroborate with observable market based data. Additionally, the majority of these independent broker quotations are non-binding.

The Company utilizes an internally developed matrix pricing process for private placement securities for which the Company is unable to obtain a price from a third-party pricing service. The Company's process is similar to the third-party pricing services. The Company develops credit spreads each month using market based data for public securities adjusted for credit spread differentials between public and private securities which are obtained from a survey of multiple private placement brokers. The credit spreads determined through this survey approach are based upon the issuer's financial strength and term to maturity, utilizing independent public security index and trade information and adjusting for the non-public nature of the securities. Credit spreads combined with risk-free rates are applied to contractual cash flows to develop a price.

The Securities Working Group performs ongoing analyses of the prices and credit spreads received from third parties to ensure that the prices represent a reasonable estimate of the fair value. This process involves quantitative and qualitative analyses and is overseen by investment and accounting professionals. As a part of these analyses, the Company considers trading volume, new issuance activity and other factors to determine whether the market activity is significantly different than normal activity in an active market, and if so, whether transactions may not be orderly considering the weight of available evidence. If the available evidence indicates that pricing is based upon transactions that are stale or not orderly, the Company places little, if any, weight on the transaction price and will estimate fair value utilizing an internal pricing model. In addition, the Company ensures that prices received from independent brokers represent a reasonable estimate of fair value through the use of internal and external cash flow models utilizing spreads, and when available, market indices. As a result of this analysis, if the Company determines that there is a more appropriate fair value based upon the available market data, the price received from the third party is adjusted accordingly and approved by the Valuation Committee.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

The Company conducts other specific monitoring controls around pricing. Daily analyses identify price changes over 3% for fixed maturities and 5% for equity securities and trade prices for both debt and equity securities that differ over 3% to the current day's price. Weekly analyses identify prices that differ more than 5% from published bond prices of a corporate bond index. Monthly analyses identify price changes over 3%, prices that have not changed, and missing prices. Also on a monthly basis, a second source validation is performed on most sectors. Analyses are conducted by a dedicated pricing unit that follows up with trading and investment sector professionals and challenges prices with vendors when the estimated assumptions used differ from what the Company feels a market participant would use. Examples of other procedures performed include, but are not limited to, initial and on-going review of third-party pricing services' methodologies, review of pricing statistics and trends and back testing recent trades.

The Company has analyzed the third-party pricing services' valuation methodologies and related inputs, and has also evaluated the various types of securities in its investment portfolio to determine an appropriate fair value hierarchy level based upon trading activity and the observability of market inputs. Most prices provided by third-party pricing services are classified into Level 2 because the inputs used in pricing the securities are observable. Due to the lack of transparency in the process that brokers use to develop prices, most valuations that are based on brokers' prices are classified as Level 3. Some valuations may be classified as Level 2 if the price can be corroborated with observable market data.

Derivative Instruments, including Embedded Derivatives within Investments

Derivative instruments are fair valued using pricing valuation models for OTC derivatives that utilize independent market data inputs, quoted market prices for exchange-traded and OTC-cleared derivatives, or independent broker quotations. Excluding embedded and reinsurance related derivatives, as of December 31, 2015 and 2014, 94% and 95%, respectively, of derivatives, based upon notional values, were priced by valuation models, including discounted cash flow models and option-pricing models that utilize present value techniques, or quoted market prices. The remaining derivatives were priced by broker quotations.

The Derivatives Working Group performs ongoing analyses of the valuations, assumptions and methodologies used to ensure that the prices represent a reasonable estimate of the fair value. The Company performs various controls on derivative valuations which include both quantitative and qualitative analyses. Analyses are conducted by a dedicated derivative pricing team that works directly with investment sector professionals to analyze impacts of changes in the market environment and investigate variances. On a daily basis, market valuations are compared to counterparty valuations for OTC derivatives. There are monthly analyses to identify market value changes greater than pre-defined thresholds, stale prices, missing prices and zero prices. Also on a monthly basis, a second source validation, typically to broker quotations, is performed for certain of the more complex derivatives and all new deals during the month. A model validation review is performed on any new models, which typically includes detailed documentation and validation to a second source. The model validation documentation and results of validation are presented to the Valuation Committee for approval. There is a monthly control to review changes in pricing sources to ensure that new models are not moved to production until formally approved.

The Company utilizes derivative instruments to manage the risk associated with certain assets and liabilities. However, the derivative instrument may not be classified with the same fair value hierarchy level as the associated assets and liabilities. Therefore the realized and unrealized gains and losses on derivatives reported in the Level 3 rollforward may be offset by realized and unrealized gains and losses of the associated assets and liabilities in other line items of the financial statements.

Valuation Inputs for Investments

For Level 1 investments, which are comprised of on-the-run U.S. Treasuries, money market funds, exchange-traded equity securities, open-ended mutual funds, short-term investments, and exchange traded futures and option contracts, valuations are based on quoted prices for identical assets in active markets that the Company has the ability to access at the measurement date.

For the Company's Level 2 and 3 debt securities, typical inputs used by pricing techniques include, but are not limited to, benchmark yields, reported trades, broker/dealer quotes, issuer spreads, benchmark securities, bids, offers, and/or estimated cash flows, prepayment speeds, and default rates. Derivative instruments are valued using mid-market inputs that are predominantly observable in the market.

A description of additional inputs used in the Company's Level 2 and Level 3 measurements is included in the following discussion:

- Level 2 The fair values of most of the Company's Level 2 investments are determined by management after considering prices received from third party pricing services. These investments include most fixed maturities and preferred stocks, including those reported in separate account assets, as well as derivative instruments.
- *ABS, CDOs, CMBS and RMBS* – Primary inputs also include monthly payment information, collateral performance, which varies by vintage year and includes delinquency rates, collateral valuation loss severity rates, collateral refinancing assumptions, and credit default swap indices. ABS and RMBS prices also include estimates of the rate of future principal prepayments over the remaining life of the securities. These estimates are derived based on the characteristics of the underlying structure and prepayment speeds previously experienced at the interest rate levels projected for the underlying collateral.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

- *Corporates, including investment grade private placements* – Primary inputs also include observations of credit default swap curves related to the issuer.
- *Foreign government/government agencies* —Primary inputs also include observations of credit default swap curves related to the issuer and political events in emerging market economies.
- *Municipals* – Primary inputs also include Municipal Securities Rulemaking Board reported trades and material event notices, and issuer financial statements.
- *Short-term investments* – Primary inputs also include material event notices and new issue money market rates.
- *Credit derivatives* – Primary inputs include the swap yield curve and credit default swap curves.
- *Foreign exchange derivatives* – Primary inputs include the swap yield curve, currency spot and forward rates, and cross currency basis curves.
- *Interest rate derivatives* – Primary input is the swap yield curve.
- *Equity derivatives* – Primary inputs include equity index levels.

Level 3 Most of the Company's securities classified as Level 3 include less liquid securities such as lower quality ABS, CMBS, commercial real estate ("CRE") CDOs and RMBS primarily backed by sub-prime loans. Also included in Level 3 are securities valued based on broker prices or broker spreads, without adjustments. Primary inputs for non-broker priced investments, including structured securities, are consistent with the typical inputs used in the preceding noted Level 2 measurements, but are Level 3 due to their less liquid markets. Additionally, certain long-dated securities are priced based on third party pricing services, including certain municipal securities, foreign government/government agency securities, and bank loans. Primary inputs for these long-dated securities are consistent with the typical inputs used in the preceding noted Level 1 and Level 2 measurements, but include benchmark interest rate or credit spread assumptions that are not observable in the marketplace. Significant inputs for Level 3 derivative contracts primarily include the typical inputs used in the preceding noted Level 1 and Level 2 measurements; but also include equity and interest rate volatility and swap yield curves beyond observable limits, and commodity price curves. Also included in Level 3 are certain derivative instruments that either have significant unobservable inputs or are valued based on broker quotations.

Transfers between Levels

Transfers of securities among the levels occur at the beginning of the reporting period. The amount of transfers from Level 1 to Level 2 was \$711 and \$1.4 billion , for the years ended December 31, 2015 and 2014 , respectively, which represented previously on-the-run U.S. Treasury securities that are now off-the-run. For the years ended December 31, 2015 and 2014 , there were no transfers from Level 2 to Level 1. See the fair value roll-forward tables for the years ended December 31, 2015 and 2014 , for the transfers into and out of Level 3.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

Significant Unobservable Inputs for Level 3 Assets Measured at Fair Value

The following tables present information about significant unobservable inputs used in Level 3 assets measured at fair value. The tables exclude ABS, CRE CDOs, index options and certain corporate securities for which fair values are predominately based on broker quotations.

As of December 31, 2015

| Securities | Unobservable Inputs | | | | | | |
|---|---------------------|---------------------------------|---|---------|----------|----------------------|---|
| Assets accounted for at fair value on a recurring basis | Fair Value | Predominant Valuation Technique | Significant Unobservable Input | Minimum | Maximum | Weighted Average [1] | Impact of Increase in Input on Fair Value [2] |
| CMBS [3] | \$ 61 | Discounted cash flows | Spread (encompasses prepayment, default risk and loss severity) | 31bps | 1,505bps | 230bps | Decrease |
| Corporate [3] | 213 | Discounted cash flows | Spread | 63bps | 800bps | 290bps | Decrease |
| Municipal [3] | 31 | Discounted cash flows | Spread | 193bps | 193bps | 193bps | Decrease |
| RMBS | 628 | Discounted cash flows | Spread | 30bps | 1,696bps | 172bps | Decrease |
| | | | Constant prepayment rate | —% | 20% | 3% | Decrease [4] |
| | | | Constant default rate | 1% | 10% | 6% | Decrease |
| | | | Loss severity | —% | 100% | 79% | Decrease |

As of December 31, 2014

| | | | | | | | |
|---------------|--------|-----------------------|---|--------|----------|--------|--------------|
| CMBS | \$ 119 | Discounted cash flows | Spread (encompasses prepayment, default risk and loss severity) | 46bps | 2,475bps | 284bps | Decrease |
| Corporate [3] | 324 | Discounted cash flows | Spread | 123bps | 765bps | 267bps | Decrease |
| Municipal [3] | 32 | Discounted cash flows | Spread | 212bps | 212bps | 212bps | Decrease |
| RMBS | 734 | Discounted cash flows | Spread | 23bps | 1,904bps | 141bps | Decrease |
| | | | Constant prepayment rate | —% | 7% | 3% | Decrease [4] |
| | | | Constant default rate | 1% | 14% | 7% | Decrease |
| | | | Loss severity | —% | 100% | 78% | Decrease |

[1] The weighted average is determined based on the fair value of the securities.

[2] Conversely, the impact of a decrease in input would have the opposite impact to the fair value as that presented in the preceding table.

[3] Level 3 CMBS, corporate and municipal securities excludes those for which the Company bases fair value on broker quotations as noted in the following discussion.

[4] Decrease for above market rate coupons and increase for below market rate coupons.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

| As of December 31, 2015 | | | | | | |
|----------------------------------|---------------------|---------------------------------|--------------------------------|---------|---------|---|
| Freestanding Derivatives | Unobservable Inputs | | | | | |
| | Fair Value | Predominant Valuation Technique | Significant Unobservable Input | Minimum | Maximum | Impact of Increase in Input on Fair Value [1] |
| Interest rate derivatives | | | | | | |
| Interest rate swaps | (30) | Discounted cash flows | Swap curve beyond 30 years | 3% | 3% | Decrease |
| GMWB hedging instruments | | | | | | |
| Equity variance swaps | (31) | Option model | Equity volatility | 19% | 21% | Increase |
| Equity options | 35 | Option model | Equity volatility | 27% | 29% | Increase |
| Customized swaps | 131 | Discounted cash flows | Equity volatility | 10% | 40% | Increase |
| Macro hedge program | | | | | | |
| Equity options [2] | 179 | Option model | Equity volatility | 14% | 28% | Increase |

| As of December 31, 2014 | | | | | | |
|----------------------------------|------|-----------------------|----------------------------|-----|-----|----------|
| Interest rate derivatives | | | | | | |
| Interest rate swaps | (29) | Discounted cash flows | Swap curve beyond 30 years | 3% | 3% | Decrease |
| Interest rate swaptions | 2 | Option Model | Interest rate volatility | 1% | 1% | Increase |
| GMWB hedging instruments | | | | | | |
| Equity options | 46 | Option model | Equity volatility | 22% | 34% | Increase |
| Customized swaps | 124 | Discounted cash flows | Equity volatility | 10% | 40% | Increase |
| Macro hedge program | | | | | | |
| Equity options | 141 | Option model | Equity volatility | 27% | 28% | Increase |

[1] Conversely, the impact of a decrease in input would have the opposite impact to the fair value as that presented in the table. Changes are based on long positions, unless otherwise noted. Changes in fair value will be inversely impacted for short positions.

[2] Level 3 macro hedge derivatives excludes those for which the Company bases fair value on broker quotations as noted in the following discussion.

Securities and derivatives for which the Company bases fair value on broker quotations predominately include ABS, CDOs, index options and corporate. Due to the lack of transparency in the process brokers use to develop prices for these investments, the Company does not have access to the significant unobservable inputs brokers use to price these securities and derivatives. The Company believes however, the types of inputs brokers may use would likely be similar to those used to price securities and derivatives for which inputs are available to the Company, and therefore may include, but not be limited to, loss severity rates, constant prepayment rates, constant default rates and credit spreads. Therefore, similar to non broker priced securities and derivatives, generally, increases in these inputs would cause fair values to decrease. For the year ended, December 31, 2015, no significant adjustments were made by the Company to broker prices received.

Product Derivatives

The Company formerly offered and subsequently reinsured certain variable annuity products with GMWB riders. Also, through reinsurance from HLIKK, the Company formerly assumed GMWB, GMIB and guaranteed minimum accumulation benefit ("GMAB") riders. Concurrent with the sale of HLIKK, HLIKK recaptured certain risks that had been reinsured to the Company and HLA I by terminating or modifying intercompany agreements. Upon closing, HLIKK is responsible for all liabilities of the recaptured business. For further discussion on the sale, see Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

The GMWB provides the policyholder with a GRB which is generally equal to premiums less withdrawals. If the policyholder's account value is reduced a specified level through a combination of market declines and withdrawals but the GRB still has value, the Company is obligated to continue to make annuity payments to the policyholder until the GRB is exhausted. Certain contract provisions can increase the GRB at contract holder election or after the passage of time. The GMWB represents an embedded derivative in the variable annuity contract. When it is determined that (1) the embedded derivative 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 derivative is bifurcated from the host for measurement purposes. The embedded derivative, which is reported with the host instrument in the Consolidated Balance Sheets, is carried at fair value with changes in fair value reported in net realized capital gains and losses. The Company's GMWB liability is carried at fair value and reported in other policyholder funds. The notional value of the embedded derivative is the GRB.

In valuing the embedded derivative, the Company attributes to the derivative a portion of the fees collected from the contract holder equal to the present value of future GMWB claims (the "Attributed Fees"). All changes in the fair value of the embedded derivative are recorded in net realized capital gains and losses. The excess of fees collected from the contract holder over the Attributed Fees are associated with the host variable annuity contract reported in fee income.

Effective April 1, 2014, HLAI, terminated its reinsurance agreement with an affiliated captive reinsurer and recaptured all reinsurance risks. For further information regarding this reinsurance agreement, see Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.

GMWB Reinsurance Derivative

The Company has reinsurance arrangements in place to transfer a portion of its risk of loss due to GMWB. These arrangements are recognized as derivatives and carried at fair value in reinsurance recoverables. Changes in the fair value of the reinsurance agreements are reported in net realized capital gains and losses.

The fair value of the GMWB reinsurance derivative is calculated as an aggregation of the components described in the Living Benefits Required to be Fair Valued discussion below and is modeled using significant unobservable policyholder behavior inputs, identical to those used in calculating the underlying liability, such as lapses, fund selection, resets and withdrawal utilization and risk margins.

Living Benefits Required to be Fair Valued (in Other Policyholder Funds and Benefits Payable)

Fair values for GMWBs classified as embedded derivatives are calculated using the income approach based upon internally developed models because active, observable markets do not exist for those items. The fair value of these GMWBs and the related reinsurance and customized freestanding derivatives are calculated as an aggregation of the following components: Best Estimate Claim Payments; Credit Standing Adjustment; and Margins. The resulting aggregation is reconciled or calibrated, if necessary, to market information that is, or may be, available to the Company, but may not be observable by other market participants, including reinsurance discussions and transactions. The Company believes the aggregation of these components, as necessary and as reconciled or calibrated to the market information available to the Company, results in an amount that the Company would be required to transfer to or receive from market participants in an active liquid market, if one existed, for those market participants to assume the risks associated with the guaranteed minimum benefits and the related reinsurance and customized derivatives. The fair value is likely to materially diverge from the ultimate settlement of the liability as the Company believes settlement will be based on our best estimate assumptions rather than those best estimate assumptions plus risk margins. In the absence of any transfer of the guaranteed benefit liability to a third party, the release of risk margins is likely to be reflected as realized gains in future periods' net income. Each component described in the following discussion is unobservable in the marketplace and requires subjectivity by the Company in determining its value. Oversight of the Company's valuation policies and processes for product and GMWB reinsurance derivatives is performed by a multidisciplinary group comprised of finance, actuarial and risk management professionals. This multidisciplinary group reviews and approves changes and enhancements to the Company's valuation model as well as associated controls.

Best Estimate Claims Costs

The Best Estimate Claims Costs is calculated based on actuarial and capital market assumptions related to projected cash flows, including the present value of benefits and related contract charges, over the lives of the contracts, incorporating expectations concerning policyholder behavior such as lapses, fund selection, resets and withdrawal utilization (for the customized derivatives, policyholder behavior is prescribed in the derivative contract). Because of the dynamic and complex nature of these cash flows, best estimate assumptions and a Monte Carlo stochastic process involving the generation of thousands of scenarios that assume risk neutral returns consistent with swap rates and a blend of observable implied index volatility levels were used. Estimating these cash flows involves numerous estimates and subjective judgments regarding a number of variables. These variables include expected markets rates of return, market volatility, correlations of market index returns to funds, fund performance, discount rates, and assumptions about policyholder behavior which emerge over time.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

At each valuation date, the Company assumes expected returns based on:

- risk-free rates as represented by the Eurodollar futures, LIBOR deposits and swap rates to derive forward curve rates;
- market implied volatility assumptions for each underlying index based primarily on a blend of observed market “implied volatility” data;
- correlations of historical returns across underlying well known market indices based on actual observed returns over the ten years preceding the valuation date; and
- three years of history for fund regression.

On a daily basis, the Company updates capital market assumptions used in the GMWB liability model such as interest rates, equity indices and the blend of implied equity index volatilities. The Company monitors various aspects of policyholder behavior and may modify certain of its assumptions, including living benefit lapses and withdrawal rates, if credible emerging data indicates that changes are warranted. In addition, the Company will continue to evaluate policyholder behavior assumptions should we implement initiatives to reduce the size of the variable annuity business. At a minimum, all policyholder behavior assumptions are reviewed and updated, as appropriate, in conjunction with the completion of the Company’s annual comprehensive study to refine its estimate of future gross profits.

Credit Standing Adjustment

This assumption makes an adjustment that market participants would make, in determining fair value, to reflect the risk that guaranteed benefit obligations or the GMWB reinsurance recoverables will not be fulfilled. The Company incorporates a blend of observable Company and reinsurer credit default spreads from capital markets, adjusted for market recoverability. For the years ended December 31, 2015, 2014 and 2013, the credit standing adjustment assumption, net of reinsurance and exclusive of the impact of the credit standing adjustment on other market sensitivities, resulted in pre-tax realized gains (losses) of \$(2), \$41 and \$492, respectively. As of December 31, 2015 and 2014, the credit standing adjustment was \$0 and \$1, respectively.

Margins

The behavior risk margin adds a margin that market participants would require for the risk that the Company’s assumptions about policyholder behavior could differ from actual experience. The behavior risk margin is calculated by taking the difference between adverse policyholder behavior assumptions and best estimate assumptions.

Assumption updates, including policyholder behavior assumptions, affected best estimates and margins for total pre-tax realized gains (losses) of \$(42), \$31 and \$28 for the years ended December 31, 2015, 2014 and 2013. As of December 31, 2015 and 2014 the behavior risk margin was \$45 and \$74, respectively.

In addition to the non-market-based updates described above, the Company recognized non-market-based updates driven by the relative outperformance (underperformance) of the underlying actively managed funds as compared to their respective indices resulting in before-tax realized gains (losses) of approximately \$(18), \$(5) and \$11 for the years ended December 31, 2015, 2014 and 2013, respectively.

The following table provides quantitative information about the significant unobservable inputs and is applicable to all of the GMWB embedded derivative and the GMWB reinsurance derivative for the years ended December 31, 2015 and 2014.

| Significant Unobservable Input | Unobservable Inputs | | |
|--------------------------------|---------------------|---------|---|
| | Minimum | Maximum | Impact of Increase in Input on Fair Value Measurement [1] |
| Withdrawal Utilization [2] | 20% | 100% | Increase |
| Withdrawal Rates [3] | —% | 8% | Increase |
| Lapse Rates [4] | —% | 75% | Decrease |
| Reset Elections [5] | 20% | 75% | Increase |
| Equity Volatility [6] | 10% | 40% | Increase |

[1] Conversely, the impact of a decrease in input would have the opposite impact to the fair value as that presented in the table.

[2] Range represents assumed cumulative percentages of policyholders taking withdrawals.

[3] Range represents assumed cumulative annual amount withdrawn by policyholders.

[4] Range represents assumed annual percentages of full surrender of the underlying variable annuity contracts across all policy durations for in force business.

[5] Range represents assumed cumulative percentages of policyholders that would elect to reset their guaranteed benefit base.

[6] Range represents implied market volatilities for equity indices based on multiple pricing sources.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

Generally a change in withdrawal utilization assumptions would be accompanied by a directionally opposite change in lapse rate assumptions, as the behavior of policyholders that utilize GMWB riders is typically different from policyholders that do not utilize these riders.

Separate Account Assets

Separate account assets are primarily invested in mutual funds. Other separate account assets include fixed maturities, limited partnerships, equity securities, short-term investments and derivatives that are valued in the same manner, and using the same pricing sources and inputs, as those investments held by the Company. Separate account assets classified as Level 3 primarily include limited partnerships in which fair value represents the separate account's share of the fair value of the equity in the investment ("net asset value") and are classified in level 3 based on the Company's ability to redeem its investment.

Assets and Liabilities Measured at Fair Value on a Recurring Basis Using Significant Unobservable Inputs (Level 3)

The following tables provide fair value roll forwards for the year ended December 31, 2015, for financial instruments classified as Level 3.

| Assets | Fixed Maturities, AFS | | | | | | | | Total Fixed Maturities, AFS | Fixed Maturities, FVO |
|--|-----------------------|---------------|--------------|---------------|------------------------------|--------------|---------------|-----------------|-----------------------------|-----------------------|
| | ABS | CDOs | CMBS | Corporate | Foreign govt./govt. agencies | Municipal | RMBS | | | |
| Fair value as of January 1, 2015 | \$ 82 | \$ 360 | \$ 119 | \$ 646 | \$ 30 | \$ 54 | \$ 734 | \$ 2,025 | \$ 84 | |
| Total realized/unrealized gains (losses) | | | | | | | | | | |
| Included in net income [1] [2] | — | (1) | — | (18) | — | — | (2) | (21) | (5) | |
| Included in OCI [3] | (2) | 3 | (5) | (38) | (3) | (5) | (2) | (52) | 1 | |
| Purchases | 22 | — | 18 | 45 | 5 | — | 154 | 244 | 6 | |
| Settlements | — | (26) | (36) | (21) | (3) | — | (126) | (212) | (23) | |
| Sales | (6) | — | (3) | (43) | (15) | — | (127) | (194) | (50) | |
| Transfers into Level 3 [4] | 1 | — | 4 | 99 | 3 | — | 16 | 123 | — | |
| Transfers out of Level 3 [4] | (92) | (6) | (35) | (136) | — | — | (19) | (288) | (11) | |
| Fair value as of December 31, 2015 | \$ 5 | \$ 330 | \$ 62 | \$ 534 | \$ 17 | \$ 49 | \$ 628 | \$ 1,625 | \$ 2 | |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2015 [2] [6] | \$ — | \$ (1) | \$ (1) | \$ (17) | \$ — | \$ — | \$ (3) | \$ (22) | \$ (3) | |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

| Assets (Liabilities) | Freestanding Derivatives [5] | | | | | | | | Total Free- Standing Derivatives [5] |
|--|------------------------------|-------------|-------------|-------------|------------------|-----------------|---------------------------|-----------|---|
| | Equity Securities AFS | Credit | Commodity | Equity | Interest Rate | GMWB Hedging | Macro Hedge Program | | |
| Fair value as of January 1, 2015 | \$ 48 | \$ (3) | \$ — | \$ 5 | \$ (27) | \$ 170 | \$ 141 | \$ | 286 |
| Total realized/unrealized gains (losses) | | | | | | | | | |
| Included in net income [1] [2] | (5) | 1 | (3) | 5 | (1) | (16) | (41) | | (55) |
| Included in OCI [3] | 1 | — | | — | — | — | — | | — |
| Purchases | 11 | (8) | | — | — | — | 47 | | 39 |
| Settlements | (1) | — | (3) | (10) | (1) | (19) | — | | (33) |
| Sales | (13) | — | | — | — | — | — | | — |
| Transfers into Level 3 [4] | — | — | 6 | — | — | — | — | | 6 |
| Transfers out of Level 3 [4] | (3) | 10 | | — | — | — | — | | 10 |
| Fair value as of December 31, 2015 | \$ 38 | \$ — | \$ — | \$ — | \$ (29) | \$ 135 | \$ 147 | \$ | 253 |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2015 [2] [6] | \$ (5) | \$ — | \$ — | \$ — | \$ — | \$ (5) | \$ (34) | \$ | (39) |

| Assets | Reinsurance Recoverable for GMWB | Separate Accounts | |
|--|-------------------------------------|-------------------|------------|
| Fair value as of January 1, 2015 | \$ | 56 \$ | 578 |
| Total realized/unrealized gains (losses) | | | |
| Included in net income [1] [2] | | 9 | 12 |
| Included in OCI [3] | | — | (5) |
| Purchases | | — | 394 |
| Settlements | | 18 | (19) |
| Sales | | — | (265) |
| Transfers into Level 3 [4] | | — | 12 |
| Transfers out of Level 3 [4] | | — | (202) |
| Fair value as of December 31, 2015 | \$ | 83 \$ | 505 |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2015 [2] [6] | \$ | 9 \$ | 11 |

| Liabilities | Other Policyholder Funds and Benefits Payable | | |
|--|---|------------------------|-------------------|
| | Guaranteed Withdrawal Benefits [7] | Equity Linked Notes | Consumer Notes |
| Fair value as of January 1, 2015 | \$ (139) | \$ (26) | \$ (3) |
| Total realized/unrealized gains (losses) | | | |
| Included in net income [1] [2] | (59) | — | 3 |
| Settlements | (64) | — | — |
| Fair value as of December 31, 2015 | \$ (262) | \$ (26) | \$ — |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2015 [2] [6] | \$ (59) | \$ — | \$ 3 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

The tables below provide a fair value roll forward for the year ended December 31, 2014, for the Level 3 financial instruments.

| Assets | Fixed Maturities, AFS | | | | | | | | Total Fixed Maturities, AFS | Fixed Maturities, FVO |
|--|-----------------------|---------------|---------------|---------------|------------------------------------|--------------|---------------|-----------------|-----------------------------|-----------------------|
| | ABS | CDOs | CMBS | Corporate | Foreign govt./govt. agencies | Municipal | RMBS | | | |
| Fair value as of January 1, 2014 | \$ 108 | \$ 428 | \$ 360 | \$ 790 | \$ 38 | \$ 49 | \$ 798 | \$ 2,571 | \$ 178 | |
| Total realized/unrealized gains (losses) | | | | | | | | | | |
| Included in net income [1] [2] | — | 11 | 6 | (10) | (1) | — | 11 | 17 | 17 | |
| Included in OCI [3] | 2 | (7) | (6) | 16 | 5 | 6 | 4 | 20 | — | |
| Purchases | 32 | 6 | 26 | 62 | 6 | — | 230 | 362 | 14 | |
| Settlements | (1) | (44) | (175) | (36) | (4) | — | (127) | (387) | (121) | |
| Sales | (11) | (21) | (34) | (96) | (14) | (1) | (150) | (327) | (4) | |
| Transfers into Level 3 [4] | 71 | 48 | 7 | 146 | — | — | — | 272 | — | |
| Transfers out of Level 3 [4] | (119) | (61) | (65) | (226) | — | — | (32) | (503) | — | |
| Fair value as of December 31, 2014 | \$ 82 | \$ 360 | \$ 119 | \$ 646 | \$ 30 | \$ 54 | \$ 734 | \$ 2,025 | \$ 84 | |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2014 [2] [6] | \$ — | \$ — | \$ (2) | \$ (4) | \$ (2) | \$ — | \$ (1) | \$ (9) | \$ 14 | |

| Assets (Liabilities) | Freestanding Derivatives [5] | | | | | | | | |
|--|------------------------------|---------------|----------------------------|-------------|----------------|---------------|---------------------|-----------------------|-------------------------------------|
| | Equity Securities, AFS | Credit | Foreign Exchange Contracts | Equity | Interest Rate | GMWB Hedging | Macro Hedge Program | Intl. Program Hedging | Total Free-Standing Derivatives [5] |
| Fair value as of January 1, 2014 | \$ 51 | \$ 2 | \$ — | \$ 2 | \$ (24) | \$ 146 | \$ 139 | \$ (61) | \$ 204 |
| Total realized/unrealized gains (losses) | | | | | | | | | |
| Included in net income [1] [2] | 4 | (2) | 2 | 3 | (5) | 13 | (12) | 24 | 23 |
| Included in OCI [3] | 1 | — | — | — | — | — | — | — | — |
| Purchases | 6 | (2) | — | — | 4 | 4 | 14 | 9 | 29 |
| Settlements | — | — | — | — | — | 7 | — | (5) | 2 |
| Sales | (14) | — | — | — | — | — | — | — | — |
| Transfers into Level 3 [4] | — | — | (2) | — | — | — | — | — | (2) |
| Transfers out of Level 3 [4] | — | (1) | — | — | (2) | — | — | 33 | 30 |
| Fair value as of December 31, 2014 | \$ 48 | \$ (3) | \$ — | \$ 5 | \$ (27) | \$ 170 | \$ 141 | \$ — | \$ 286 |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2014 [2] [6] | \$ (1) | \$ (3) | \$ — | \$ — | \$ (5) | \$ 1 | \$ (11) | \$ 17 | \$ (1) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

| Assets | Reinsurance Recoverable for GMWB | | Separate Accounts |
|--|---|-----------|--------------------------|
| Fair value as of January 1, 2014 | \$ | (465) | \$ 737 |
| Total realized/unrealized gains (losses) | | | |
| Included in net income [1] [2] | | 441 | 13 |
| Purchases | | — | 339 |
| Settlements | | 80 | (3) |
| Sales | | — | (201) |
| Transfers into Level 3 [4] | | — | 37 |
| Transfers out of Level 3 [4] | | — | (344) |
| Fair value as of December 31, 2014 | \$ | 56 | \$ 578 |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2014 [2] [6] | \$ | 441 | \$ 8 |

| Liabilities | Other Policyholder Funds and Benefits Payable [1] | | | |
|--|--|--------------------------------|--|---------------------------|
| | Guaranteed Living Benefits [6] | Equity Linked Notes | Total Other Policyholder Funds and Benefits Payable | Consumer Notes |
| Fair value as of January 1, 2014 | \$ (576) | \$ (18) | \$ (594) | \$ (2) |
| Total realized/unrealized gains (losses) | | | | |
| Included in net income [1] [2] | 577 | (8) | 569 | (1) |
| Settlements | (140) | — | (140) | — |
| Fair value as of December 31, 2014 | \$ (139) | \$ (26) | \$ (165) | \$ (3) |
| Changes in unrealized gains (losses) included in net income related to financial instruments still held at December 31, 2014 [2] [6] | \$ 167 | \$ (8) | \$ 159 | \$ (1) |

[1] The Company classifies gains and losses on GMWB reinsurance derivatives and GMWB embedded derivatives as unrealized gains (losses) for purposes of disclosure in this table because it is impracticable to track on a contract-by-contract basis the realized gains (losses) for these derivatives and embedded derivatives.

[2] All amounts in these rows are reported in net realized capital gains (losses). The realized/unrealized gains (losses) included in net income for separate account assets are offset by an equal amount for separate account liabilities, which results in a net zero impact on net income for the Company. All amounts are before income taxes and amortization of DAC.

[3] All amounts are before income taxes and amortization of DAC.

[4] Transfers in and/or (out) of Level 3 are primarily attributable to the availability of market observable information and the re-evaluation of the observability of pricing inputs.

[5] Derivative instruments are reported in this table on a net basis for asset (liability) positions and reported in the Consolidated Balance Sheet in other investments and other liabilities.

[6] Includes both market and non-market impacts in deriving realized and unrealized gains (losses).

[7] Settlements of other liabilities reflect the removal of liabilities carried at fair value upon the deconsolidation of a variable interest entity. See Note 3 - Investments and Derivative Instruments of Notes to Consolidated Financial Statements for additional information.

Fair Value Option

FVO investments include certain securities that contain embedded credit derivatives with underlying credit risk primarily related to residential and commercial real estate, for which the company has elected the fair value option. The Company also classifies the underlying fixed maturities held in certain consolidated investment funds within the Fixed Maturities, FVO line on the Consolidated Balance Sheets. The Company reports these consolidated investment companies at fair value with changes in the fair value of these securities recognized in net realized capital gains and losses, which is consistent with accounting requirements for investment companies. The investment funds hold fixed income securities in multiple sectors and the Company has management and control of the funds as well as a significant ownership interest.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

The Company also elected the fair value option for certain equity securities in order to align the accounting with total return swap contracts that hedge the risk associated with the investments. The swaps do not qualify for hedge accounting and the change in value of both the equity securities and the total return swaps are recorded in net realized capital gains and losses. These equity securities are classified within equity securities, AFS on the Consolidated Balance Sheets. Income earned from FVO securities is recorded in net investment income and changes in fair value are recorded in net realized capital gains and losses.

The following table presents the changes in fair value of those assets and liabilities accounted for using the fair value option reported in net realized capital gains and losses in the Company's Consolidated Statements of Operations.

| | Year Ended December 31, | |
|--|-------------------------|--------------|
| | 2015 | 2014 |
| Assets | | |
| Fixed maturities, FVO | | |
| CDOs | \$ 1 | \$ 21 |
| Corporate | (3) | (3) |
| Foreign government | 2 | 16 |
| Total fixed maturities, FVO | \$ — | \$ 34 |
| Equity, FVO | (12) | (2) |
| Total realized capital gains (losses) | \$ (12) | \$ 32 |

The following table presents the fair value of assets and liabilities accounted for using the fair value option included in the Company's Consolidated Balance Sheets.

| | Year Ended December 31, | |
|------------------------------------|-------------------------|---------------|
| | 2015 | 2014 |
| Assets | | |
| Fixed maturities, FVO | | |
| ABS | \$ 4 | \$ 13 |
| CDOs | 1 | 67 |
| CMBS | 6 | 15 |
| Corporate | 31 | 96 |
| Foreign government | 1 | 3 |
| Municipals | — | 2 |
| RMBS | 119 | 82 |
| U.S. Government | 3 | 2 |
| Total fixed maturities, FVO | \$ 165 | \$ 280 |
| Equity, FVO [1] | \$ 281 | \$ 248 |

[1] Included in equity securities, AFS on the Consolidated Balance Sheets.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2. Fair Value Measurements (continued)

Financial Instruments Not Carried at Fair Value

The following table presents carrying amounts and fair values of the Company's financial instruments not carried at fair value.

| | Fair Value Hierarchy Level | December 31, 2015 | | December 31, 2014 | |
|---|-------------------------------|--------------------|------------|--------------------|------------|
| | | Carrying Amount | Fair Value | Carrying Amount | Fair Value |
| Assets | | | | | |
| Policy loans | Level 3 | \$ 1,446 | \$ 1,446 | \$ 1,430 | \$ 1,430 |
| Mortgage loans | Level 3 | 2,918 | 2,995 | 3,109 | 3,280 |
| Liabilities | | | | | |
| Other policyholder funds and benefits payable [1] | Level 3 | 6,611 | 6,802 | 7,134 | 7,353 |
| Consumer notes [2] [3] | Level 3 | 38 | 38 | 68 | 68 |
| Assumed investment contracts [3] | Level 3 | 619 | 682 | 763 | 851 |

[1] Excludes group accident and health and universal life insurance contracts, including corporate owned life insurance.

[2] Excludes amounts carried at fair value and included in disclosures above.

[3] Included in other liabilities in the Consolidated Balance Sheets.

Fair values for policy loans were determined using current loan coupon rates, which reflect the current rates available under the contracts. As a result, the fair value approximates the carrying value of the policy loans. During the second quarter of 2014, the Company changed the valuation technique used to estimate the fair value of policy loans, which previously was estimated by utilizing discounted cash flow calculations, using U.S. Treasury interest rates, based on the loan durations.

Fair values for mortgage loans were estimated using discounted cash flow calculations based on current lending rates for similar type loans. Current lending rates reflect changes in credit spreads and the remaining terms of the loans.

Fair values for other policyholder funds and benefits payable and assumed investment contracts, not carried at fair value, were estimated based on the cash surrender values of the underlying policies or by estimating future cash flows discounted at current interest rates adjusted for credit risk.

Fair values for consumer notes were estimated using discounted cash flow calculations using current interest rates adjusted for estimated loan durations.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivative Instruments

Net Investment Income

| <i>(Before-tax)</i> | For the years ended December 31, | | |
|--|----------------------------------|-----------------|-----------------|
| | 2015 | 2014 | 2013 |
| Fixed maturities [1] | \$ 1,095 | \$ 1,113 | \$ 1,253 |
| Equity securities | 7 | 14 | 8 |
| Mortgage loans | 152 | 156 | 172 |
| Policy loans | 82 | 80 | 82 |
| Limited partnerships and other alternative investments | 97 | 141 | 119 |
| Other investments [2] | 82 | 111 | 125 |
| Investment expenses | (59) | (72) | (76) |
| Total net investment income | \$ 1,456 | \$ 1,543 | \$ 1,683 |

[1] Includes net investment income on short-term investments.

[2] Includes income from derivatives that hedge fixed maturities and qualify for hedge accounting.

Net Realized Capital Gains (Losses)

| <i>(Before-tax)</i> | For the years ended December 31, | | |
|--|----------------------------------|---------------|---------------|
| | 2015 | 2014 | 2013 |
| Gross gains on sales [1] | \$ 239 | \$ 264 | \$ 2,196 |
| Gross losses on sales | (211) | (235) | (700) |
| Net OTTI losses recognized in earnings | (61) | (29) | (45) |
| Valuation allowances on mortgage loans | (4) | (4) | (1) |
| Japanese fixed annuity contract hedges, net [2] | — | (14) | 6 |
| Periodic net coupon settlements on credit derivatives | 6 | 11 | (3) |
| Results of variable annuity hedge program | | | |
| GMWB derivatives, net | (87) | 5 | 262 |
| Macro hedge program | (46) | (11) | (234) |
| Total U.S. program | (133) | (6) | 28 |
| International Program [3] | — | (126) | (963) |
| Total results of variable annuity hedge program | (133) | (132) | (935) |
| GMIB/GMAB/GMWB reinsurance | — | 579 | 1,107 |
| Modified coinsurance reinsurance contracts | 46 | 395 | (1,405) |
| Other, net [4] | (28) | (258) | 106 |
| Net realized capital gains (losses), before-tax | \$ (146) | \$ 577 | \$ 326 |

[1] Includes \$1.5 billion of gross gains relating to the sales of the Retirement Plans and Individual Life businesses in the year ended December 31, 2013.

[2] For the years ended December 31, 2014 and 2013, includes the transactional foreign currency re-valuation gains (losses) of \$(51) and \$324, respectively, related to the Japan fixed annuity product, as well as the change in value related to the derivative hedging instruments and the Japan government FVO securities of \$37, and \$(318), respectively.

[3] Includes \$(2) and \$(55) of transactional foreign currency re-valuation losses for the years ended December 31, 2014 and 2013, respectively.

[4] Other, net gains and losses include transactional foreign currency revaluation gains (losses) on the yen denominated fixed payout annuity liabilities and gains (losses) on non-qualifying derivatives used to hedge the foreign currency exposure of the liabilities. Gains (losses) from transactional foreign currency revaluation of the reinsured liabilities were \$4, \$116, and \$250, respectively, for the years ended December 31, 2015, 2014 and 2013. Gains (losses) on the instruments used to hedge the foreign currency exposure on the reinsured fixed payout annuities were \$(21), \$(148), and \$(268), respectively, for the years ended December 31, 2015, 2014 and 2013. Includes \$71 of gains relating to the sales of the Retirement Plans and Individual Life businesses for the year ended December 31, 2013 as well as changes in value of non-qualifying derivatives. Also includes for the year ended December 31, 2014 a loss of \$(213) related to the recapture of the GMIB/GMAB/GMWB reinsurance contracts, which is offset by gains on the termination of the embedded derivative reflected in the GMIB/GMAB/GMWB reinsurance line.

Net realized capital gains and losses from investment sales are reported as a component of revenues and are determined on a specific identification basis. Before tax, net gains and losses on sales and impairments previously reported as unrealized gains or losses in AOCI were \$(27), \$1 and \$1.4 billion for the years ended December 31, 2015, 2014 and 2013, respectively.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Sales of Available-for-Sale Securities

| | For the years ended December 31, | | |
|-------------------------------|----------------------------------|----------|-----------|
| | 2015 | 2014 | 2013 |
| Fixed maturities, AFS | | | |
| Sale proceeds | \$ 9,454 | \$ 9,084 | \$ 19,190 |
| Gross gains [1] | 195 | 210 | 1,867 |
| Gross losses | (161) | (183) | (421) |
| Equity securities, AFS | | | |
| Sale proceeds | \$ 586 | \$ 107 | \$ 81 |
| Gross gains | 26 | 9 | 254 |
| Gross losses | (26) | (6) | (263) |

[1] Includes \$1.5 billion of gross gains relating to the sales of the Retirement Plans and Individual Life businesses for the year ended December 31, 2013.

Sales of AFS securities in 2015 were primarily a result of duration and liquidity management, as well as tactical changes to the portfolio as a result of changing market conditions.

Recognition and Presentation of Other-Than-Temporary Impairments

The Company deems bonds and certain equity securities with debt-like characteristics (collectively “debt securities”) to be other-than-temporarily impaired (“impaired”) if a security meets the following conditions: a) the Company intends to sell or it is more likely than not that the Company will be required to sell the security before a recovery in value (“intent-to-sell”), or b) the Company does not expect to recover the entire amortized cost basis of the security. If the Company intends to sell or it is more likely than not that the Company will be required to sell the security before a recovery in value, a charge is recorded in net realized capital losses equal to the difference between the fair value and amortized cost basis of the security. For those impaired debt securities which do not meet the first condition and for which the Company does not expect to recover the entire amortized cost basis, the difference between the security’s amortized cost basis and the fair value is separated into the portion representing a credit OTTI, which is recorded in net realized capital losses, and the remaining non-credit impairment, which is recorded in OCI. Generally, the Company determines a security’s credit impairment as the difference between its amortized cost basis and its best estimate of expected future cash flows discounted at the security’s effective yield prior to impairment. The remaining non-credit impairment is the difference between the security’s fair value and the Company’s best estimate of expected future cash flows discounted at the security’s effective yield prior to the impairment, which typically includes current market liquidity and risk premiums. The previous amortized cost basis less the impairment recognized in net realized capital losses becomes the security’s new cost basis. The Company accretes the new cost basis to the estimated future cash flows over the expected remaining life of the security by prospectively adjusting the security’s yield, if necessary.

The Company’s evaluation of whether a credit impairment exists for debt securities includes but is not limited to, the following factors: (a) changes in the financial condition of the security’s underlying collateral, (b) whether the issuer is current on contractually obligated interest and principal payments, (c) changes in the financial condition, credit rating and near-term prospects of the issuer, (d) the extent to which the fair value has been less than the amortized cost of the security and (e) the payment structure of the security. The Company’s best estimate of expected future cash flows used to determine the credit loss amount is a quantitative and qualitative process that incorporates information received from third-party sources along with certain internal assumptions and judgments regarding the future performance of the security. The Company’s best estimate of future cash flows involves assumptions including, but not limited to, various performance indicators, such as historical and projected default and recovery rates, credit ratings, current and projected delinquency rates, and loan-to-value (“LTV”) ratios. In addition, for structured securities, the Company considers factors including, but not limited to, average cumulative collateral loss rates that vary by vintage year, commercial and residential property value declines that vary by property type and location and commercial real estate delinquency levels. These assumptions require the use of significant management judgment and include the probability of issuer default and estimates regarding timing and amount of expected recoveries which may include estimating the underlying collateral value. In addition, projections of expected future debt security cash flows may change based upon new information regarding the performance of the issuer and/or underlying collateral such as changes in the projections of the underlying property value estimates.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

For equity securities where the decline in the fair value is deemed to be other-than-temporary, a charge is recorded in net realized capital losses equal to the difference between the fair value and cost basis of the security. The previous cost basis less the impairment becomes the security's new cost basis. The Company asserts its intent and ability to retain those equity securities deemed to be temporarily impaired until the price recovers. Once identified, these securities are systematically restricted from trading unless approved by investment and accounting professionals. The investment and accounting professionals will only authorize the sale of these securities based on predefined criteria that relate to events that could not have been reasonably foreseen. Examples of the criteria include, but are not limited to, the deterioration in the issuer's financial condition, security price declines, a change in regulatory requirements or a major business combination or major disposition.

The primary factors considered in evaluating whether an impairment exists for an equity security include, but are not limited to: (a) the length of time and extent to which the fair value has been less than the cost of the security, (b) changes in the financial condition, credit rating and near-term prospects of the issuer, (c) whether the issuer is current on preferred stock dividends and (d) the intent and ability of the Company to retain the investment for a period of time sufficient to allow for recovery.

The following table presents the Company's impairments by impairment type.

| | For the years ended December 31, | | |
|----------------------------------|----------------------------------|--------------|--------------|
| | 2015 | 2014 | 2013 |
| Intent-to-sell impairments | \$ 24 | \$ 11 | \$ 18 |
| Credit impairments | 23 | 16 | 18 |
| Impairments on equity securities | 14 | 1 | 9 |
| Other impairments | — | 1 | — |
| Total impairments | \$ 61 | \$ 29 | \$ 45 |

The following table presents a roll-forward of the Company's cumulative credit impairments on fixed maturities held.

| <i>(Before-tax)</i> | For the years ended December 31, | | |
|---|----------------------------------|-----------------|-----------------|
| | 2015 | 2014 | 2013 |
| Balance, beginning of period | \$ (296) | \$ (410) | \$ (813) |
| Additions for credit impairments recognized on [1]: | | | |
| Securities not previously impaired | (11) | (7) | (14) |
| Securities previously impaired | (12) | (9) | (4) |
| Reductions for credit impairments previously recognized on: | | | |
| Securities that matured or were sold during the period | 58 | 111 | 403 |
| Securities the Company made the decision to sell or more likely than not will be required to sell | 1 | — | 1 |
| Securities due to an increase in expected cash flows | 49 | 19 | 17 |
| Balance as of end of period | \$ (211) | \$ (296) | \$ (410) |

[1] These additions are included in the net OTTI losses recognized in earnings in the Consolidated Statements of Operations.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Available-for-Sale Securities

The following table presents the Company's AFS securities by type.

| | December 31, 2015 | | | | | December 31, 2014 | | | | |
|------------------------------------|------------------------|------------------------|-------------------------|------------------|---------------------|------------------------|------------------------|-------------------------|------------------|---------------------|
| | Cost or Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Non-Credit OTTI [1] | Cost or Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Non-Credit OTTI [1] |
| ABS | \$ 864 | \$ 16 | \$ (34) | \$ 846 | \$ — | \$ 1,181 | \$ 20 | \$ (30) | \$ 1,171 | \$ — |
| CDOs [2] | 1,354 | 67 | (11) | 1,408 | — | 1,083 | 84 | (20) | 1,148 | — |
| CMBS | 1,936 | 52 | (24) | 1,964 | (3) | 1,797 | 97 | (7) | 1,887 | (3) |
| Corporate | 14,425 | 975 | (225) | 15,175 | (3) | 14,166 | 1,685 | (109) | 15,742 | (3) |
| Foreign govt./govt. agencies | 328 | 14 | (11) | 331 | — | 576 | 35 | (9) | 602 | — |
| Municipal | 1,057 | 80 | (5) | 1,132 | — | 935 | 118 | (1) | 1,052 | — |
| RMBS | 1,468 | 43 | (8) | 1,503 | — | 1,805 | 64 | (12) | 1,857 | — |
| U.S. Treasuries | 2,127 | 184 | (13) | 2,298 | — | 1,717 | 261 | (1) | 1,977 | — |
| Total fixed maturities, AFS | 23,559 | 1,431 | (331) | 24,657 | (6) | 23,260 | 2,364 | (189) | 25,436 | (6) |
| Equity securities, AFS [3] | 178 | 11 | (11) | 178 | — | 275 | 10 | (19) | 266 | — |
| Total AFS securities | \$ 23,737 | \$ 1,442 | \$ (342) | \$ 24,835 | \$ (6) | \$ 23,535 | \$ 2,374 | \$ (208) | \$ 25,702 | \$ (6) |

[1] Represents the amount of cumulative non-credit OTTI losses recognized in OCI on securities that also had credit impairments. These losses are included in gross unrealized losses as of December 31, 2015 and 2014.

[2] Gross unrealized gains (losses) exclude the fair value of bifurcated embedded derivatives within certain securities. Subsequent changes in value are recorded in net realized capital gains (losses).

[3] Excludes equity securities, FVO, with a cost and fair value of \$293 and \$281, respectively, as of December 31, 2015, and \$250 and \$248 as of December 31, 2014.

The following table presents the Company's fixed maturities, AFS, by contractual maturity year.

| Contractual Maturity | December 31, 2015 | | December 31, 2014 | |
|---|-------------------|------------------|-------------------|------------------|
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| One year or less | \$ 953 | \$ 974 | \$ 1,031 | \$ 1,043 |
| Over one year through five years | 4,973 | 5,075 | 4,902 | 5,168 |
| Over five years through ten years | 3,650 | 3,714 | 3,345 | 3,501 |
| Over ten years | 8,361 | 9,173 | 8,116 | 9,661 |
| Subtotal | 17,937 | 18,936 | 17,394 | 19,373 |
| Mortgage-backed and asset-backed securities | 5,622 | 5,721 | 5,866 | 6,063 |
| Total fixed maturities, AFS | \$ 23,559 | \$ 24,657 | \$ 23,260 | \$ 25,436 |

Estimated maturities may differ from contractual maturities due to security call or prepayment provisions. Due to the potential for variability in payment speeds (i.e. prepayments or extensions), mortgage-backed and asset-backed securities are not categorized by contractual maturity.

Concentration of Credit Risk

The Company aims to maintain a diversified investment portfolio including issuer, sector and geographic stratification, where applicable, and has established certain exposure limits, diversification standards and review procedures to mitigate credit risk.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

The Company had no investment exposure to any credit concentration risk of a single issuer greater than 10% of the Company's stockholders' equity, other than the U.S. government and certain U.S. government securities as of December 31, 2015 or 2014. As of December 31, 2015, other than U.S. government and certain U.S. government agencies, the Company's three largest exposures by issuer were Morgan Stanley, Verizon Communications Inc., and Bank of America Corp. which each comprised less than 1% of total invested assets. As of December 31, 2014, other than U.S. government and certain U.S. government agencies, the Company's three largest exposures by issuer were the HSBC Holdings PLC, Verizon Communication Inc., and Bank of America Corp., which each comprised less than 1% of total invested assets.

The Company's three largest exposures by sector as of December 31, 2015, were financial services, utilities, and consumer non-cyclical which comprised approximately 11%, 8% and 7%, respectively, of total invested assets. The Company's three largest exposures by sector as of December 31, 2014 were financial services, utilities, and consumer non-cyclical which comprised approximately 9%, 8% and 7%, respectively, of total invested assets.

Unrealized Losses on AFS Securities

The following tables present the Company's unrealized loss aging for AFS securities by type and length of time the security was in a continuous unrealized loss position.

| | December 31, 2015 | | | | | | | | |
|--|---------------------|-----------------|----------------------|-------------------|-----------------|----------------------|-------------------|-----------------|----------------------|
| | Less Than 12 Months | | | 12 Months or More | | | Total | | |
| | Amortized Cost | Fair Value | Unrealized Losses | Amortized Cost | Fair Value | Unrealized Losses | Amortized Cost | Fair Value | Unrealized Losses |
| ABS | \$ 387 | \$ 385 | \$ (2) | \$ 271 | \$ 239 | \$ (32) | \$ 658 | \$ 624 | \$ (34) |
| CDOs [1] | 608 | 602 | (6) | 500 | 493 | (5) | 1,108 | 1,095 | (11) |
| CMBS | 655 | 636 | (19) | 99 | 94 | (5) | 754 | 730 | (24) |
| Corporate | 4,880 | 4,696 | (184) | 363 | 322 | (41) | 5,243 | 5,018 | (225) |
| Foreign govt./govt. agencies | 144 | 136 | (8) | 30 | 27 | (3) | 174 | 163 | (11) |
| Municipal | 179 | 174 | (5) | — | — | — | 179 | 174 | (5) |
| RMBS | 280 | 279 | (1) | 230 | 223 | (7) | 510 | 502 | (8) |
| U.S. Treasuries | 963 | 950 | (13) | 8 | 8 | — | 971 | 958 | (13) |
| Total fixed maturities, AFS | 8,096 | 7,858 | (238) | 1,501 | 1,406 | (93) | 9,597 | 9,264 | (331) |
| Equity securities, AFS [2] | 83 | 79 | (4) | 44 | 37 | (7) | 127 | 116 | (11) |
| Total securities in an unrealized loss position | \$ 8,179 | \$ 7,937 | \$ (242) | \$ 1,545 | \$ 1,443 | \$ (100) | \$ 9,724 | \$ 9,380 | \$ (342) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

| | December 31, 2014 | | | | | | | | |
|--|---------------------|-----------------|----------------------|-------------------|-----------------|----------------------|-------------------|-----------------|----------------------|
| | Less Than 12 Months | | | 12 Months or More | | | Total | | |
| | Amortized Cost | Fair Value | Unrealized Losses | Amortized Cost | Fair Value | Unrealized Losses | Amortized Cost | Fair Value | Unrealized Losses |
| ABS | \$ 368 | \$ 367 | \$ (1) | \$ 340 | \$ 311 | \$ (29) | \$ 708 | \$ 678 | \$ (30) |
| CDOs [1] | 123 | 122 | (1) | 771 | 753 | (19) | 894 | 875 | (20) |
| CMBS | 109 | 108 | (1) | 194 | 188 | (6) | 303 | 296 | (7) |
| Corporate | 1,542 | 1,491 | (51) | 661 | 603 | (58) | 2,203 | 2,094 | (109) |
| Foreign govt./govt. agencies | 145 | 140 | (5) | 68 | 64 | (4) | 213 | 204 | (9) |
| Municipal | 14 | 14 | — | 13 | 12 | (1) | 27 | 26 | (1) |
| RMBS | 148 | 147 | (1) | 229 | 218 | (11) | 377 | 365 | (12) |
| U.S. Treasuries | 184 | 184 | — | 18 | 17 | (1) | 202 | 201 | (1) |
| Total fixed maturities, AFS | 2,633 | 2,573 | (60) | 2,294 | 2,166 | (129) | 4,927 | 4,739 | (189) |
| Equity securities, AFS [2] | 81 | 75 | (6) | 92 | 79 | (13) | 173 | 154 | (19) |
| Total securities in an unrealized loss position | \$ 2,714 | \$ 2,648 | \$ (66) | \$ 2,386 | \$ 2,245 | \$ (142) | \$ 5,100 | \$ 4,893 | \$ (208) |

[1] Unrealized losses exclude the change in fair value of bifurcated embedded derivatives within certain securities for which changes in fair value are recorded in net realized capital gains (losses).

[2] As of December 31, 2015 and 2014, excludes equity securities, FVO which are included in equity securities, AFS on the Consolidated Balance Sheets.

As of December 31, 2015, AFS securities in an unrealized loss position consisted of 2,814 securities, primarily in the corporate sector, as well as commercial and residential real estate and student loan ABS, which were depressed primarily due to an increase in interest rates and/or widening of credit spreads since the securities were purchased. As of December 31, 2015, 92% of these securities were depressed less than 20% of cost or amortized cost. The increase in unrealized losses during 2015 was primarily attributable to wider credit spreads and an increase in interest rates.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Most of the securities depressed for twelve months or more primarily relate to student loan ABS and corporate securities concentrated in the financial services and energy sectors, as well as structured securities with exposure to commercial and residential real estate. Student loan ABS and corporate financial services securities were primarily depressed because the securities have floating-rate coupons and have long-dated maturities, and current credit spreads are wider than when these securities were purchased. Corporate securities within the energy sector are primarily depressed due to a decline in oil prices. For certain commercial and residential real estate securities, current market spreads are wider than spreads at the securities' respective purchase dates. The Company neither has an intention to sell nor does it expect to be required to sell the securities outlined in the preceding discussion.

Mortgage Loans

Mortgage Loan Valuation Allowances

The Company's security monitoring process reviews mortgage loans on a quarterly basis to identify potential credit losses. Commercial mortgage loans are considered to be impaired when management estimates that, based upon current information and events, it is probable that the Company will be unable to collect amounts due according to the contractual terms of the loan agreement. Criteria used to determine if an impairment exists include, but are not limited to: current and projected macroeconomic factors, such as unemployment rates, and property-specific factors such as rental rates, occupancy levels, LTV ratios and debt service coverage ratios ("DSCR"). In addition, the Company considers historic, current and projected delinquency rates and property values. These assumptions require the use of significant management judgment and include the probability and timing of borrower default and loss severity estimates. In addition, projections of expected future cash flows may change based upon new information regarding the performance of the borrower and/or underlying collateral such as changes in the projections of the underlying property value estimates.

For mortgage loans that are deemed impaired, a valuation allowance is established for the difference between the carrying amount and the Company's share of either (a) the present value of the expected future cash flows discounted at the loan's effective interest rate, (b) the loan's observable market price or, most frequently, (c) the fair value of the collateral. A valuation allowance has been established for either individual loans or as a projected loss contingency for loans with an LTV ratio of 90% or greater and after consideration of other credit quality factors, including DSCR. Changes in valuation allowances are recorded in net realized capital gains and losses. Interest income on impaired loans is accrued to the extent it is deemed collectible and the loans continue to perform under the original or restructured terms. Interest income ceases to accrue for loans when it is probable that the Company will not receive interest and principal payments according to the contractual terms of the loan agreement. Loans may resume accrual status when it is determined that sufficient collateral exists to satisfy the full amount of the loan and interest payments, as well as when it is probable cash will be received in the foreseeable future. Interest income on defaulted loans is recognized when received.

| | December 31, 2015 | | | December 31, 2014 | | |
|--|-----------------------|------------------------|-----------------|-----------------------|------------------------|-----------------|
| | Amortized Cost [1] | Valuation Allowance | Carrying Value | Amortized Cost [1] | Valuation Allowance | Carrying Value |
| Total commercial mortgage loans | \$ 2,937 | \$ (19) | \$ 2,918 | \$ 3,124 | \$ (15) | \$ 3,109 |

[1] Amortized cost represents carrying value prior to valuation allowances, if any.

As of December 31, 2015 and 2014, the carrying value of mortgage loans associated with the valuation allowance was \$39 and \$49, respectively. There were no mortgage loans held-for-sale as of December 31, 2015, or December 31, 2014. As of December 31, 2015, loans within the Company's mortgage loan portfolio that have had extensions or restructurings other than what is allowable under the original terms of the contract are immaterial.

The following table presents the activity within the Company's valuation allowance for mortgage loans. These loans have been evaluated both individually and collectively for impairment. Loans evaluated collectively for impairment are immaterial.

| | For the years ended December 31, | | |
|----------------------------------|----------------------------------|----------------|----------------|
| | 2015 | 2014 | 2013 |
| Balance as of January 1 | \$ (15) | \$ (12) | \$ (14) |
| (Additions)/Reversals | (4) | (4) | (2) |
| Deductions | — | 1 | 4 |
| Balance as of December 31 | \$ (19) | \$ (15) | \$ (12) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

The weighted-average LTV ratio of the Company's commercial mortgage loan portfolio was 54% as of December 31, 2015, while the weighted-average LTV ratio at origination of these loans was 63%. LTV ratios compare the loan amount to the value of the underlying property collateralizing the loan. The loan values are updated no less than annually through property level reviews of the portfolio. Factors considered in the property valuation include, but are not limited to, actual and expected property cash flows, geographic market data and capitalization rates. DSCR compares a property's net operating income to the borrower's principal and interest payments. The weighted average DSCR of the Company's commercial mortgage loan portfolio was 2.45 x as of December 31, 2015. As of December 31, 2015, the Company held one delinquent commercial mortgage loan past due by 90 days or more. The loan had a total carrying value and valuation allowance of \$15 and \$16, respectively, and was not accruing income. As of December 31, 2014, the Company held no delinquent commercial mortgage loans past due by 90 days or more.

The following table presents the carrying value of the Company's commercial mortgage loans by LTV and DSCR.

| Loan-to-value | Commercial Mortgage Loans Credit Quality | | | |
|--|--|----------------------------------|-------------------|----------------------------------|
| | December 31, 2015 | | December 31, 2014 | |
| | Carrying Value | Avg. Debt-Service Coverage Ratio | Carrying Value | Avg. Debt-Service Coverage Ratio |
| Greater than 80% | \$ 15 | 0.91x | \$ 21 | 1.14x |
| 65% - 80% | 280 | 1.78x | 452 | 1.71x |
| Less than 65% | 2,623 | 2.54x | 2,636 | 2.49x |
| Total commercial mortgage loans | \$ 2,918 | 2.45x | \$ 3,109 | 2.36x |

The following tables present the carrying value of the Company's mortgage loans by region and property type.

| | Mortgage Loans by Region | | | |
|-----------------------------|--------------------------|------------------|-------------------|------------------|
| | December 31, 2015 | | December 31, 2014 | |
| | Carrying Value | Percent of Total | Carrying Value | Percent of Total |
| East North Central | \$ 66 | 2.3% | \$ 64 | 2.1% |
| East South Central | 14 | 0.5% | — | —% |
| Middle Atlantic | 210 | 7.2% | 272 | 8.7% |
| Mountain | 4 | 0.1% | 35 | 1.1% |
| New England | 163 | 5.6% | 146 | 4.7% |
| Pacific | 933 | 32.0% | 905 | 29.1% |
| South Atlantic | 579 | 19.8% | 532 | 17.1% |
| West North Central | 1 | —% | 15 | 0.5% |
| West South Central | 125 | 4.3% | 125 | 4.0% |
| Other [1] | 823 | 28.2% | 1,015 | 32.7% |
| Total mortgage loans | \$ 2,918 | 100% | \$ 3,109 | 100% |

[1] Primarily represents loans collateralized by multiple properties in various regions.

| | Mortgage Loans by Property Type | | | |
|-----------------------------|---------------------------------|------------------|-------------------|------------------|
| | December 31, 2015 | | December 31, 2014 | |
| | Carrying Value | Percent of Total | Carrying Value | Percent of Total |
| Commercial | | | | |
| Agricultural | \$ 16 | 0.5% | \$ 22 | 0.7% |
| Industrial | 829 | 28.4% | 989 | 31.8% |
| Lodging | 26 | 0.9% | 26 | 0.8% |
| Multifamily | 557 | 19.1% | 522 | 16.8% |
| Office | 729 | 25.0% | 723 | 23.3% |
| Retail | 650 | 22.3% | 713 | 22.9% |
| Other | 111 | 3.8% | 114 | 3.7% |
| Total mortgage loans | \$ 2,918 | 100% | \$ 3,109 | 100% |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Variable Interest Entities

The Company is involved with various special purpose entities and other entities that are deemed to be VIEs primarily as a collateral or investment manager and as an investor through normal investment activities, as well as a means of accessing capital through a contingent capital facility ("the facility"). For further information on the facility, see Note 7 - Debt of Notes to Consolidated Financial Statements.

A VIE is an entity that either has investors that lack certain essential characteristics of a controlling financial interest or lacks sufficient funds to finance its own activities without financial support provided by other entities. The Company performs ongoing qualitative assessments of its VIEs to determine whether the Company has a controlling financial interest in the VIE and therefore is the primary beneficiary. The Company is deemed to have a controlling financial interest when it has both the ability to direct the activities that most significantly impact the economic performance of the VIE and the obligation to absorb losses or right to receive benefits from the VIE that could potentially be significant to the VIE. Based on the Company's assessment, if it determines it is the primary beneficiary, the Company consolidates the VIE in the Company's Consolidated Financial Statements.

Consolidated VIEs

The following table presents the carrying value of assets and liabilities, and the maximum exposure to loss relating to the VIEs for which the Company is the primary beneficiary. Creditors have no recourse against the Company in the event of default by these VIEs nor does the Company have any implied or unfunded commitments to these VIEs. The Company's financial or other support provided to these VIEs is limited to its collateral or investment management services and original investment.

| | December 31, 2015 | | | December 31, 2014 | | |
|--|-------------------|--------------------------|------------------------------------|-------------------|--------------------------|------------------------------------|
| | Total Assets | Total Liabilities [1] | Maximum Exposure to Loss [2] | Total Assets | Total Liabilities [1] | Maximum Exposure to Loss [2] |
| Investment funds [3] | \$ 52 | \$ 11 | \$ 42 | \$ 154 | \$ 20 | \$ 138 |
| Limited partnerships and other alternative investments | 2 | 1 | 1 | 3 | 2 | 1 |
| Total | \$ 54 | \$ 12 | \$ 43 | \$ 157 | \$ 22 | \$ 139 |

[1] Included in other liabilities in the Company's Consolidated Balance Sheets.

[2] The maximum exposure to loss represents the maximum loss amount that the Company could recognize as a reduction in net investment income or as a realized capital loss and is the cost basis of the Company's investment.

[3] Total assets included in fixed maturities, FVO, short-term investments, and equity, AFS in the Company's Consolidated Balance Sheets.

Investment funds represent fixed income funds for which the Company has management and control of investments which is the activity that most significantly impacts its economic performance. The decline in investments funds is due to redemptions paid by one of the funds. Limited partnerships represent one hedge fund of funds for which the Company holds a majority interest in the fund as an investment.

Non-Consolidated VIEs

The Company, through normal investment activities, makes passive investments in structured securities issued by VIEs for which the Company is not the manager which are included in ABS, CDOs, CMBS and RMBS in the AFS security table and fixed maturities, FVO, in the Company's Consolidated Balance Sheets. The Company has not provided financial or other support with respect to these investments other than its original investment. For these investments, the Company determined it is not the primary beneficiary due to the relative size of the Company's investment in comparison to the principal amount of the structured securities issued by the VIEs, the level of credit subordination which reduces the Company's obligation to absorb losses or right to receive benefits and the Company's inability to direct the activities that most significantly impact the economic performance of the VIEs. The Company's maximum exposure to loss on these investments is limited to the amount of the Company's investment.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Securities Lending, Repurchase Agreements and Other Collateral Transactions

The Company participates in securities lending programs to generate additional income. Through these programs, certain fixed maturities within the corporate, foreign government/government agencies, and equity securities are loaned from the Company's portfolio to qualifying third-party borrowers in return for collateral in the form of cash or securities. Borrowers of these securities provide collateral of 102% and 105% of the fair value of the securities lent at the time of the loan for domestic and non-domestic securities, respectively. The borrower will return the securities to the Company for cash or securities collateral at maturity dates generally of 90 days or less. Security collateral on deposit from counterparties in connection with securities lending transactions may not be sold or re-pledged, except in the event of default, and is not reflected on the Company's consolidated balance sheets. The fair value of the loaned securities is monitored and additional collateral is obtained if the fair value of the collateral falls below 100% of the fair value of the loaned securities. The agreements provide the counterparty the right to sell or re-pledge the securities transferred. If cash, rather than securities, is received as collateral, the cash is typically invested in short-term investments or fixed maturities and is reported as an asset on the consolidated balance sheets. Income associated with securities lending transactions is reported as a component of net investment income on the Company's consolidated statements of operations. As of December 31, 2015, the fair value of securities on loan and the associated liability for cash collateral received was \$15 and \$15, respectively. The Company had no securities on loan as of December 31, 2014.

From time to time, the Company enters into repurchase agreements to manage liquidity or to earn incremental spread income. A repurchase agreement is a transaction in which one party (transferor) agrees to sell securities to another party (transferee) in return for cash (or securities), with a simultaneous agreement to repurchase the same securities at a specified price at a later date. A dollar roll is a type of repurchase agreement where a mortgage backed security is sold with an agreement to repurchase substantially the same security at a specified time in the future. These transactions generally have a contractual maturity of ninety days or less.

As part of repurchase agreements, the Company transfers collateral of U.S. government and government agency securities and receives cash. For repurchase agreements, the Company obtains cash in an amount equal to at least 95% of the fair value of the securities transferred. The agreements contain contractual provisions that require additional collateral to be transferred when necessary and provide the counterparty the right to sell or re-pledge the securities transferred. The cash received from the repurchase program is typically invested in short-term investments or fixed maturities. Repurchase agreements include master netting provisions that provide the counterparties the right to offset claims and apply securities held by them with respect to their obligations in the event of a default. Although the Company has the contractual right to offset claims, fixed maturities do not meet the specific conditions for net presentation under U.S. GAAP. The Company accounts for the repurchase agreements as collateralized borrowings. The securities transferred under repurchase agreements are included in fixed maturities, AFS with the obligation to repurchase those securities recorded in other liabilities on the Company's Consolidated Balance Sheets.

As of December 31, 2015, the Company reported in fixed maturities, AFS and cash on the Consolidated Balance Sheets financial collateral pledged relating to repurchase agreements of \$249. The Company reported a corresponding obligation to repurchase the pledged securities of \$249 in other liabilities on the Consolidated Balance Sheets. The Company had no outstanding dollar roll transactions as of December 31, 2015. The Company had no outstanding repurchase agreements or dollar roll transactions as of December 31, 2014.

The Company is required by law to deposit securities with government agencies in certain states in which it conducts business. As of December 31, 2015 and 2014 the fair value of securities on deposit was approximately \$14 and \$14, respectively.

Refer to Derivative Collateral Arrangements section of this note for disclosure of collateral in support of derivative transactions.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Equity Method Investments

The majority of the Company's investments in limited partnerships and other alternative investments, including hedge funds, mortgage and real estate funds, and private equity and other funds (collectively, "limited partnerships"), are accounted for under the equity method of accounting. The Company's maximum exposure to loss as of December 31, 2015 is limited to the total carrying value of \$1.2 billion. In addition, the Company has outstanding commitments totaling approximately \$299, to fund limited partnership and other alternative investments as of December 31, 2015. The Company's investments in limited partnerships are generally of a passive nature in that the Company does not take an active role in the management of the limited partnerships. In 2015, aggregate investment income (losses) from limited partnerships and other alternative investments exceeded 10% of the Company's pre-tax consolidated net income. Accordingly, the Company is disclosing aggregated summarized financial data for the Company's limited partnership investments. This aggregated summarized financial data does not represent the Company's proportionate share of limited partnership assets or earnings. Aggregate total assets of the limited partnerships in which the Company invested totaled \$82.2 billion and \$72.0 billion as of December 31, 2015 and 2014, respectively. Aggregate total liabilities of the limited partnerships in which the Company invested totaled \$14.0 billion and \$9.0 billion as of December 31, 2015 and 2014, respectively. Aggregate net investment income (loss) of the limited partnerships in which the Company invested totaled \$0.8 billion, \$3.5 billion and \$1.8 billion for the periods ended December 31, 2015, 2014 and 2013, respectively. Aggregate net income (loss) of the limited partnerships in which the Company invested totaled \$5.2 billion, \$8.7 billion, and \$7.1 billion for the periods ended December 31, 2015, 2014 and 2013, respectively. As of, and for the period ended, December 31, 2015, the aggregated summarized financial data reflects the latest available financial information.

Derivative Instruments

The Company utilizes a variety of OTC, OTC-cleared and exchange traded derivative instruments as a part of its overall risk management strategy as well as to enter into replication transactions. Derivative instruments are used to manage risk associated with interest rate, equity market, commodity market, credit spread, issuer default, price, and currency exchange rate risk or volatility. Replication transactions are used as an economical means to synthetically replicate the characteristics and performance of assets that are permissible investments under the Company's investment policies. The Company also may enter into and has previously issued financial instruments and products that either are accounted for as free-standing derivatives, such as certain reinsurance contracts, or may contain features that are deemed to be embedded derivative instruments, such as the GMWB rider included with certain variable annuity products.

Strategies that Qualify for Hedge Accounting

Certain derivatives the Company enters into satisfy the hedge accounting requirements as outlined in Note 1 of these financial statements. Typically, these hedge relationships include interest rate swaps and, to a lesser extent, foreign currency swaps where the terms or expected cash flows of the hedged item closely match the terms of the swap. The interest rate swaps are typically used to manage interest rate duration of certain fixed maturity securities or liability contracts. The hedge strategies by hedge accounting designation include:

Cash Flow Hedges

Interest rate swaps are predominantly used to manage portfolio duration and better match cash receipts from assets with cash disbursements required to fund liabilities. These derivatives primarily convert interest receipts on floating-rate fixed maturity securities to fixed rates.

Foreign currency swaps are used to convert foreign currency-denominated cash flows related to certain investment receipts and liability payments to U.S. dollars in order to reduce cash flow fluctuations due to changes in currency rates.

Fair Value Hedges

Interest rate swaps are used to hedge the changes in fair value of fixed maturity securities due to fluctuations in interest rates. These swaps are typically used to manage interest rate duration.

Non-qualifying Strategies

Derivative relationships that do not qualify for hedge accounting ("non-qualifying strategies") primarily include the hedge program for the Company's variable annuity products as well as the hedging and replication strategies that utilize credit default swaps. In addition, hedges of interest rate, foreign currency and equity risk of certain fixed maturities, equities and liabilities do not qualify for hedge accounting.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

The non-qualifying strategies include:

Interest Rate Swaps, Swaptions, and Futures

The Company may use interest rate swaps, swaptions, and futures to manage duration between assets and liabilities in certain investment portfolios. In addition, the Company enters into interest rate swaps to terminate existing swaps, thereby offsetting the changes in value of the original swap. As of December 31, 2015 and 2014 the notional amount of interest rate swaps in offsetting relationships was \$4.6 billion and \$4.5 billion, respectively.

Foreign Currency Swaps and Forwards

The Company enters into foreign currency swaps and forwards to convert the foreign currency exposures of certain foreign currency-denominated fixed maturity investments to U.S. dollars. During 2015, the Company entered into foreign currency forwards to hedge non-U.S. dollar denominated cash and equity securities.

Fixed Payout Annuity Hedge

The Company reinsures certain yen denominated fixed payout annuities. The Company invests in U.S. dollar denominated assets to support the reinsurance liability. The Company entered into pay U.S. dollar, receive yen swap contracts to hedge the currency and yen interest rate exposure between the U.S. dollar denominated assets and the yen denominated fixed liability reinsurance payments.

Credit Contracts

Credit default swaps are used to purchase credit protection on an individual entity or referenced index to economically hedge against default risk and credit-related changes in value of fixed maturity securities. Credit default swaps are also used to assume credit risk related to an individual entity or referenced index as a part of replication transactions. These contracts require the Company to pay or receive a periodic fee in exchange for compensation from the counterparty should the referenced security issuers experience a credit event, as defined in the contract. The Company is also exposed to credit risk related to certain structured fixed maturity securities that have embedded credit derivatives, which reference a standard index of corporate securities. In addition, the Company enters into credit default swaps to terminate existing credit default swaps, thereby offsetting the changes in value of the original swap going forward.

Equity Index Swaps and Options

The Company enters into total return swaps to hedge equity risk of specific common stock investments which are accounted for using the fair value option in order to align the accounting treatment within net realized capital gains (losses). The Company may also use equity index options to hedge the impact of an adverse equity market environment on the investment portfolio. In addition, the Company formerly offered certain equity indexed products, a portion of which contain embedded derivatives that require bifurcation. The Company uses equity index swaps to economically hedge the equity volatility risk associated with the equity indexed products.

Commodity Contracts

During 2015, the Company purchased for \$11 put option contracts on West Texas Intermediate oil futures with a strike of \$35 dollars per barrel in order to partially offset potential losses related to certain fixed maturity securities that could arise if oil prices decline substantially. The Company has since reduced its exposure to the targeted fixed maturity securities and therefore, these options were terminated in December 2015.

GMWB Derivatives, net

The Company formerly offered certain variable annuity products with GMWB riders. The GMWB product is a bifurcated embedded derivative ("GMWB product derivatives") that has a notional value equal to the GRB. The Company uses reinsurance contracts to transfer a portion of its risk of loss due to GMWB. The reinsurance contracts covering GMWB ("GMWB reinsurance contracts") are accounted for as free-standing derivatives with a notional amount equal to the GRB amount.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

The Company utilizes derivatives (“GMWB hedging instruments”) as part of an actively managed program designed to hedge a portion of the capital market risk exposures of the non-reinsured GMWB riders due to changes in interest rates, equity market levels, and equity volatility. These derivatives include customized swaps, interest rate swaps and futures, and equity swaps, options and futures, on certain indices including the S&P 500 index, EAFE index and NASDAQ index. The following table presents notional and fair value for GMWB hedging instruments.

| | Notional Amount | | Fair Value | |
|------------------------------------|-------------------|-------------------|-------------------|-------------------|
| | December 31, 2015 | December 31, 2014 | December 31, 2015 | December 31, 2014 |
| Customized swaps | \$ 5,877 | \$ 7,041 | \$ 131 | \$ 124 |
| Equity swaps, options, and futures | 1,362 | 3,761 | 2 | 39 |
| Interest rate swaps and futures | 3,740 | 3,640 | 25 | 11 |
| Total | \$ 10,979 | \$ 14,442 | \$ 158 | \$ 174 |

Macro Hedge Program

The Company utilizes equity options, swaps, futures, and foreign currency options to partially hedge against a decline in the equity markets and the resulting statutory surplus and capital impact primarily arising from the guaranteed minimum death benefit (“GMDB”) and GMWB obligations. The following table presents notional and fair value for the macro hedge program.

| | Notional Amount | | Fair Value | |
|--------------------------|-------------------|-------------------|-------------------|-------------------|
| | December 31, 2015 | December 31, 2014 | December 31, 2015 | December 31, 2014 |
| Equity options and swaps | \$ 4,548 | \$ 5,983 | \$ 147 | \$ 141 |
| Foreign currency options | — | 400 | — | — |
| Total | \$ 4,548 | \$ 6,383 | \$ 147 | \$ 141 |

Modified Coinsurance Reinsurance Contracts

As of December 31, 2015 and 2014, the Company had approximately \$895 and \$1.0 billion, respectively, of invested assets supporting other policyholder funds and benefits payable reinsured under a modified coinsurance arrangement in connection with the sale of the Individual Life business, which was structured as a reinsurance transaction. The assets are primarily held in a trust established by the Company. The Company pays or receives cash quarterly to settle the results of the reinsured business, including the investment results. As a result of this modified coinsurance arrangement, the Company has an embedded derivative that transfers to the reinsurer certain unrealized changes in fair value due to interest rate and credit risks of these assets. The notional amount of the embedded derivative reinsurance contracts are the invested assets that are carried at fair value supporting the reinsured reserves.

Derivative Balance Sheet Classification

The following table summarizes the balance sheet classification of the Company’s derivative related net fair value amounts as well as the gross asset and liability fair value amounts. For reporting purposes, the Company has elected to offset within total assets or total liabilities based upon the net of the fair value amounts, income accruals, and related cash collateral receivables and payables of OTC derivative instruments executed in a legal entity and with the same counterparty under a master netting agreement, which provides the Company with the legal right of offset. The Company has also elected to offset within total assets or total liabilities based upon the net of the fair value amounts, income accruals and related cash collateral receivables and payables of OTC-cleared derivative instruments based on clearing house agreements. The following fair value amounts do not include income accruals or related cash collateral receivables and payables, which are netted with derivative fair value amounts to determine balance sheet presentation. Derivatives in the Company’s separate accounts where the associated gains and losses accrue directly to policyholders are not included in the table below. The Company’s derivative instruments are held for risk management purposes, unless otherwise noted in the following table. The notional amount of derivative contracts represents the basis upon which pay or receive amounts are calculated and is presented in the table to quantify the volume of the Company’s derivative activity. Notional amounts are not necessarily reflective of credit risk. The following tables exclude investments that contain an embedded credit derivative for which the Company has elected the fair value option. For further discussion, see the Fair Value Option section in Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

| Hedge Designation/ Derivative Type | Net Derivatives | | | | Asset Derivatives | | Liability Derivatives | |
|---|------------------|------------------|-----------------|-----------------|-------------------|-----------------|-----------------------|-------------------|
| | Notional Amount | | Fair Value | | Fair Value | | Fair Value | |
| | Dec 31, 2015 | Dec 31, 2014 | Dec 31, 2015 | Dec 31, 2014 | Dec 31, 2015 | Dec 31, 2014 | Dec 31, 2015 | Dec 31, 2014 |
| Cash flow hedges | | | | | | | | |
| Interest rate swaps | \$ 1,766 | \$ 2,242 | \$ 38 | \$ 37 | \$ 38 | \$ 37 | \$ — | \$ — |
| Foreign currency swaps | 143 | 143 | (19) | (19) | 7 | 3 | (26) | (22) |
| Total cash flow hedges | 1,909 | 2,385 | 19 | 18 | 45 | 40 | (26) | (22) |
| Fair value hedges | | | | | | | | |
| Interest rate swaps | 23 | 32 | — | — | — | — | — | — |
| Total fair value hedges | 23 | 32 | — | — | — | — | — | — |
| Non-qualifying strategies | | | | | | | | |
| <i>Interest rate contracts</i> | | | | | | | | |
| Interest rate swaps and futures | 4,710 | 4,857 | (415) | (323) | 285 | 385 | (700) | (708) |
| <i>Foreign exchange contracts</i> | | | | | | | | |
| Foreign currency swaps and forwards | 386 | 60 | 4 | — | 4 | — | — | — |
| Fixed payout annuity hedge | 1,063 | 1,319 | (357) | (427) | — | — | (357) | (427) |
| <i>Credit contracts</i> | | | | | | | | |
| Credit derivatives that purchase credit protection | 249 | 276 | 10 | (1) | 12 | 4 | (2) | (5) |
| Credit derivatives that assume credit risk [1] | 1,435 | 946 | (10) | 7 | 5 | 11 | (15) | (4) |
| Credit derivatives in offsetting positions | 1,435 | 2,175 | (1) | (1) | 17 | 21 | (18) | (22) |
| <i>Equity contracts</i> | | | | | | | | |
| Equity index swaps and options | 404 | 422 | 15 | 1 | 41 | 30 | (26) | (29) |
| <i>Variable annuity hedge program</i> | | | | | | | | |
| GMWB product derivatives [2] | 15,099 | 17,908 | (262) | (139) | — | — | (262) | (139) |
| GMWB reinsurance contracts | 3,106 | 3,659 | 83 | 56 | 83 | 56 | — | — |
| GMWB hedging instruments | 10,979 | 14,442 | 158 | 174 | 264 | 289 | (106) | (115) |
| Macro hedge program | 4,548 | 6,383 | 147 | 141 | 179 | 180 | (32) | (39) |
| <i>Other</i> | | | | | | | | |
| Modified coinsurance reinsurance contracts | 895 | 974 | 79 | 34 | 79 | 34 | — | — |
| Total non-qualifying strategies | 44,309 | 53,421 | (549) | (478) | 969 | 1,010 | (1,518) | (1,488) |
| Total cash flow hedges, fair value hedges, and non-qualifying strategies | \$ 46,241 | \$ 55,838 | \$ (530) | \$ (460) | \$ 1,014 | \$ 1,050 | \$ (1,544) | \$ (1,510) |
| Balance Sheet Location | | | | | | | | |
| Fixed maturities, available-for-sale | \$ 184 | \$ 186 | \$ (1) | \$ 1 | \$ — | \$ 1 | \$ (1) | \$ — |
| Other investments | 11,837 | 13,588 | 250 | 339 | 360 | 478 | (110) | (139) |
| Other liabilities | 15,071 | 19,473 | (653) | (725) | 492 | 481 | (1,145) | (1,206) |
| Reinsurance recoverables | 4,000 | 4,633 | 162 | 90 | 162 | 90 | — | — |
| Other policyholder funds and benefits payable | 15,149 | 17,958 | (288) | (165) | — | — | (288) | (165) |
| Total derivatives | \$ 46,241 | \$ 55,838 | \$ (530) | \$ (460) | \$ 1,014 | \$ 1,050 | \$ (1,544) | \$ (1,510) |

[1] The derivative instruments related to this strategy are held for other investment purposes.

[2] These derivatives are embedded within liabilities and are not held for risk management purposes.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Change in Notional Amount

The net decrease in notional amount of derivatives since December 31, 2014 was primarily due to the following:

- The decline in notional amount related to the GMWB hedging instruments and the macro hedge program was primarily driven by portfolio re-positioning, a decline in equity markets, and the expiration of certain options. The decline in the GMWB product related notional amount was primarily driven by policyholder lapses and partial withdrawals.
- The decline in notional amount associated with interest rate derivatives was primarily driven by maturities of the derivatives.
- These declines were partially offset by an increase in notional amount related to credit derivatives that assume credit risk as a means to earn credit spread while re-balancing within certain fixed maturity sectors.
- Additional increases in notional related to foreign currency swaps and forwards were primarily driven by the purchase of foreign currency forwards to hedge Japanese yen-denominated cash and equity securities.

Change in Fair Value

The net decrease in the total fair value of derivative instruments since December 31, 2014 was primarily related to the following:

- The decrease in fair value related to the combined GMWB hedging program, which includes the GMWB product, reinsurance, and hedging derivatives, was primarily driven by liability model assumption updates, and underperformance of the underlying actively managed funds compared to their respective indices.
- The decrease in fair value of non-qualifying interest rate derivatives was primarily due to an increase in interest rates.
- The increase in fair value of fixed payout annuity hedges was primarily driven by the maturity of a currency swap, partially offset by an increase in interest rates.
- The increase in the fair value associated with modified coinsurance reinsurance contracts, which are accounted for as embedded derivatives and transfer to the reinsurer the investment experience related to the assets supporting the reinsured policies, was primarily driven by widening credit spreads and an increase in interest rates.

Offsetting of Derivative Assets/Liabilities

The following tables present the gross fair value amounts, the amounts offset, and net position of derivative instruments eligible for offset in the Company's Consolidated Balance Sheets. Amounts offset include fair value amounts, income accruals and related cash collateral receivables and payables associated with derivative instruments that are traded under a common master netting agreement, as described in the preceding discussion. Also included in the tables are financial collateral receivables and payables, which are contractually permitted to be offset upon an event of default, although are disallowed for offsetting under U.S. GAAP.

As of December 31, 2015

| Description | (i) | (ii) | (iii) = (i) - (ii) | | (iv) | (v) = (iii) - (iv) |
|-------------------|------------------------------------|---|--|---|---|--------------------|
| | Gross Amounts of Recognized Assets | Gross Amounts Offset in the Statement of Financial Position | Net Amounts Presented in the Statement of Financial Position | | Collateral Disallowed for Offset in the Statement of Financial Position | Net Amount |
| | | | Derivative Assets [1] | Accrued Interest and Cash Collateral Received [2] | Financial Collateral Received [4] | |
| Other investments | \$ 852 | \$ 692 | \$ 250 | \$ (90) | \$ 99 | \$ 61 |

| Description | Gross Amounts of Recognized Liabilities | Gross Amounts Offset in the Statement of Financial Position | Accrued Interest and Cash | | Financial Collateral Pledged [4] | Net Amount |
|-------------------|---|---|----------------------------|------------------------|----------------------------------|------------|
| | | | Derivative Liabilities [3] | Collateral Pledged [3] | | |
| Other liabilities | \$ (1,255) | \$ (499) | \$ (653) | \$ (103) | \$ (753) | \$ (3) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

As of December 31, 2014

| Description | (i) | (ii) | (iii) = (i) - (ii) | | (iv) | (v) = (iii) - (iv) |
|-------------------|------------------------------------|---|--|---|---|--------------------|
| | Gross Amounts of Recognized Assets | Gross Amounts Offset in the Statement of Financial Position | Net Amounts Presented in the Statement of Financial Position | Accrued Interest and Cash Collateral Received [2] | Collateral Disallowed for Offset in the Statement of Financial Position | Net Amount |
| | | | Derivative Assets [1] | | Financial Collateral Received [4] | |
| Other investments | \$ 959 | \$ 801 | \$ 339 | \$ (181) | \$ 83 | \$ 75 |

| Description | Gross Amounts of Recognized Liabilities | Gross Amounts Offset in the Statement of Financial Position | Derivative Liabilities [3] | Accrued Interest and Cash Collateral Pledged [3] | Financial Collateral Pledged [4] | Net Amount |
|-------------|---|---|----------------------------|--|----------------------------------|------------|
| | Other liabilities | \$ (1,345) | \$ (574) | \$ (722) | \$ (49) | \$ (900) |

[1] Included in other investments in the Company's Consolidated Balance Sheets.

[2] Included in other assets in the Company's Consolidated Balance Sheets and is limited to the net derivative receivable associated with each counterparty.

[3] Included in other liabilities in the Company's Consolidated Balance Sheets and is limited to the net derivative payable associated with each counterparty.

[4] Excludes collateral associated with exchange-traded derivatives instruments.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of OCI and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing hedge ineffectiveness are recognized in current period earnings. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness.

The following table presents the components of the gain or loss on derivatives that qualify as cash flow hedges:

Derivatives in Cash Flow Hedging Relationships

| | Gain (Loss) Recognized in OCI on Derivative (Effective Portion) | | | Net Realized Capital Gains (Losses) Recognized in Income on Derivative (Ineffective Portion) | | |
|------------------------|---|--------------|-----------------|--|-------------|---------------|
| | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| Interest rate swaps | \$ 3 | \$ 34 | \$ (158) | \$ — | \$ 2 | \$ (2) |
| Foreign currency swaps | — | (10) | 12 | — | — | — |
| Total | \$ 3 | \$ 24 | \$ (146) | \$ — | \$ 2 | \$ (2) |

Derivatives in Cash Flow Hedging Relationships

| | | Gain (Loss) Reclassified from AOCI into Income (Effective Portion) | | |
|------------------------|-------------------------------------|--|--------------|---------------|
| | | 2015 | 2014 | 2013 |
| Interest rate swaps | Net realized capital gains (losses) | \$ (1) | \$ (1) | \$ 70 |
| Interest rate swaps | Net investment income (loss) | 33 | 50 | 57 |
| Foreign currency swaps | Net realized capital gains (losses) | (9) | (13) | 4 |
| Total | | \$ 23 | \$ 36 | \$ 131 |

As of December 31, 2015, the before-tax deferred net gains on derivative instruments recorded in AOCI that are expected to be reclassified to earnings during the next twelve months are \$21. This expectation is based on the anticipated interest payments on hedged investments in fixed maturity securities that will occur over the next twelve months, at which time the Company will recognize the deferred net gains (losses) as an adjustment to net investment income over the term of the investment cash flows.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

During the years ended December 31, 2015, 2014, and 2013, the Company had no net reclassifications from AOCI to earnings resulting from the discontinuance of cash-flow hedges due to forecasted transactions that were no longer probable of occurring.

Fair Value Hedges

For derivative instruments that are designated and qualify as fair value hedges, the gain or loss on the derivatives as well as the offsetting loss or gain on the hedged items attributable to the hedged risk are recognized in current earnings. The Company includes the gain or loss on the derivative in the same line item as the offsetting loss or gain on the hedged item. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness.

The Company recognized in income gains (losses) representing the ineffective portion of fair value hedges as follows:

| | Derivatives in Fair Value Hedging Relationships | | | | | |
|---|--|--------------------|-------------------|--------------------|-------------------|--------------------|
| | Gain (Loss) Recognized in Income [1] | | | | | |
| | 2015 | | 2014 | | 2013 | |
| | Derivative | Hedged Item | Derivative | Hedged Item | Derivative | Hedged Item |
| Interest rate swaps | | | | | | |
| Net realized capital gains (losses) | \$ — | \$ — | \$ (2) | \$ 4 | \$ 27 | \$ (24) |
| Foreign currency swaps | | | | | | |
| Net realized capital gains (losses) | — | — | — | — | 1 | (1) |
| Benefits, losses and loss adjustment expenses | — | — | — | — | (2) | 2 |
| Total | \$ — | \$ — | \$ (2) | \$ 4 | \$ 26 | \$ (23) |

[1] The amounts presented do not include the periodic net coupon settlements of the derivative or the coupon income (expense) related to the hedged item. The net of the amounts presented represents the ineffective portion of the hedge.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Non-qualifying Strategies

For non-qualifying strategies, including embedded derivatives that are required to be bifurcated from their host contracts and accounted for as derivatives, the gain or loss on the derivative is recognized currently in earnings within net realized capital gains (losses). The following table presents the gain or loss recognized in income on non-qualifying strategies:

| | Non-qualifying Strategies Gain (Loss) Recognized within Net Realized Capital Gains (Losses) | | |
|--|--|---------------|-------------------|
| | December 31, | | |
| | 2015 | 2014 | 2013 |
| <i>Interest rate contracts</i> | | | |
| Interest rate swaps, caps, floors, and forwards | \$ (7) | \$ (6) | \$ (5) |
| <i>Foreign exchange contracts</i> | | | |
| Foreign currency swaps and forwards | 5 | 4 | 4 |
| Fixed payout annuity hedge [1] | (21) | (148) | (268) |
| Japanese fixed annuity hedging instruments [2] | — | 22 | (207) |
| <i>Credit contracts</i> | | | |
| Credit derivatives that purchase credit protection | 3 | (6) | (20) |
| Credit derivatives that assume credit risk | (4) | 10 | 46 |
| <i>Equity contracts</i> | | | |
| Equity index swaps and options | 19 | 7 | (22) |
| <i>Commodity contracts</i> | | | |
| Commodity options | (5) | — | — |
| <i>Variable annuity hedge program</i> | | | |
| GMWB product derivatives | (59) | (2) | 1,306 |
| GMWB reinsurance contracts | 17 | 4 | (192) |
| GMWB hedging instruments | (45) | 3 | (852) |
| Macro hedge program | (46) | (11) | (234) |
| International program hedging instruments | — | (126) | (963) |
| <i>Other</i> | | | |
| GMAB, GMWB, and GMIB reinsurance contracts | — | 579 | 1,107 |
| Modified coinsurance reinsurance contracts | 46 | 395 | (1,405) |
| Derivatives formerly associated with Japan [3] | — | (2) | — |
| Total [4] | \$ (97) | \$ 723 | \$ (1,705) |

[1] The associated liability is adjusted for changes in spot rates through realized capital gains and was \$4, \$116 and \$250 for the years ended December 31, 2015, 2014 and 2013, respectively, which is not presented in this table.

[2] The associated liability is adjusted for changes in spot rates through realized capital gains and losses and was \$(51) and \$324 for the years ended December 31, 2014, and 2013, respectively.

[3] These amounts relate to the termination of the hedging program associated with the Japan variable annuity product due to the sale of HLIKK.

[4] Excludes investments that contain an embedded credit derivative for which the Company has elected the fair value option. For further discussion, see the Fair Value Option section in Note 2 - Fair Value Measurements.

For the year ended December 31, 2015 the net realized capital gain (loss) related to derivatives used in non-qualifying strategies was primarily comprised of the following:

- The net loss related to the yen denominated fixed payout annuity hedge was primarily driven by a decline in long term interest rates and a depreciation of the Japanese yen in relation to the U.S. dollar.
- The net gain related to equity derivatives was primarily driven by a total return swap used to hedge equity securities that increased due to a decline in Japanese equity markets since inception. An offsetting change in value was recorded on the equity securities since the Company has elected the fair value option in order to align the accounting with the derivative, resulting in changes in value on both the equity securities and the derivative recorded in net realized capital gains and losses. For further discussion, see the Fair Value Option section in Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.
- The net loss related to the combined GMWB hedging program, which includes the GMWB product, reinsurance, and hedging derivatives, was primarily driven by liability model assumption updates, and underperformance of the underlying actively managed funds compared to their respective indices.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

- The net loss on the macro hedge program was primarily due to time decay on options.
- The gain associated with modified coinsurance reinsurance contracts, which are accounted for as embedded derivatives and transfer to the reinsurer the investment experience related to the assets supporting the reinsured policies, was primarily driven by widening credit spreads and an increase in interest rates. The assets remain on the Company's books and the Company recorded an offsetting gain in AOCI as a result of the increase in market value of the bonds.

In addition, for the years ended December 31, 2015 and 2014, the Company recognized gains of \$2 and \$12, respectively, due to cash recovered on derivative receivables that were previously written-off related to the bankruptcy of Lehman Brothers Inc. The derivative receivables were the result of the contractual collateral threshold amounts and open collateral calls prior to the bankruptcy filing as well as interest rate and credit spread movements from the date of the last collateral call to the date of the bankruptcy filing. For the year ended December 31, 2013, there were no recognized gains due to derivative receivables that were previously written-off related to the bankruptcy of Lehman Brothers Inc.

For the year ended December 31, 2014 the net realized capital gain (loss) related to derivatives used in non-qualifying strategies was primarily comprised of the following:

- The net gain on the GMIB, GMAB, and GMWB reinsurance contracts was driven by the sale of HLIKK and concurrent recapture of the associated risks by HLIKK. For further discussion on the sale, see Note 1 - Basis of Presentation and Significant Accounting Policies of Notes to the Consolidated Financial Statements.
- The net gain on the coinsurance and modified coinsurance reinsurance contracts was primarily due to the termination of a certain reinsurance contract, which was with an affiliated captive reinsurer and was accounted for as an embedded derivative. For a discussion related to the reinsurance agreement and the termination, refer to Note 4 - Reinsurance, and Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.
- The net losses related to the yen denominated fixed payout annuity hedge were driven by a decline in interest rates and a depreciation of the Japanese yen in relation to the U.S. dollar.
- The net losses related to the international program hedging instruments was primarily driven by an improvement in global equity markets and declines in volatility levels and interest rates.

For the year ended December 31, 2013 the net realized capital gain (loss) related to derivatives used in non-qualifying strategies was primarily due to the following:

- The net loss associated with the international program hedging instruments was primarily driven by an improvement in global equity markets and depreciation of the Japanese yen in relation to the euro.
- The net gain related to the combined GMWB hedging program, which includes the GMWB product, reinsurance, and hedging derivatives, was primarily driven by revaluing the liability for living benefits resulting from favorable policyholder behavior largely related to increased full surrenders and liability assumption updates for partial lapses and withdrawal rates.
- The net gain associated with GMAB, GMWB, and GMIB reinsurance contracts, which are reinsured to an affiliated captive reinsurer, was primarily due to a depreciation of the Japanese yen and an improvement in equity markets.
- The net loss on the coinsurance and modified coinsurance reinsurance agreement, which is accounted for as a derivative instrument primarily offsets the net gain on GMAB, GMWB, and GMIB reinsurance contracts. For a discussion related to the reinsurance agreement refer to Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.
- The net loss related to the fixed payout annuity hedge was primarily driven by a depreciation of the Japanese yen in relation to the U.S. dollar.

The net loss on the macro hedge program was primarily due to an improvement in domestic equity markets, an increase in interest rates, and a decline in equity volatility.

For additional disclosures regarding contingent credit related features in derivative agreements refer to Note 9 - Commitments and Contingencies of Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

Credit Risk Assumed through Credit Derivatives

The Company enters into credit default swaps that assume credit risk of a single entity or referenced index in order to synthetically replicate investment transactions that would be permissible under the Company's investment policies. The Company will receive periodic payments based on an agreed upon rate and notional amount and will only make a payment if there is a credit event. A credit event payment will typically be equal to the notional value of the swap contract less the value of the referenced security issuer's debt obligation after the occurrence of the credit event. A credit event is generally defined as a default on contractually obligated interest or principal payments or bankruptcy of the referenced entity. The credit default swaps in which the Company assumes credit risk primarily reference investment grade single corporate issuers and baskets, which include standard diversified portfolios of corporate and CMBS issuers. The diversified portfolios of corporate issuers are established within sector concentration limits and may be divided into tranches that possess different credit ratings.

The following tables present the notional amount, fair value, weighted average years to maturity, underlying referenced credit obligation type and average credit ratings, and offsetting notional amounts and fair value for credit derivatives in which the Company is assuming credit risk as of December 31, 2015 and 2014 .

As of December 31, 2015

| Credit Derivative type by derivative risk exposure | Notional Amount [2] | Fair Value | Weighted Average Years to Maturity | Underlying Referenced Credit Obligation(s) [1] | | Average Credit Rating | Offsetting Notional Amount [3] | Offsetting Fair Value [3] |
|--|---------------------|---------------|------------------------------------|--|--|-----------------------|--------------------------------|---------------------------|
| | | | | Type | | | | |
| Single name credit default swaps | | | | | | | | |
| Investment grade risk exposure | \$ 118 | \$ — | 1 year | Corporate Credit/ Foreign Gov. | | BBB+ | \$ 115 | \$ (1) |
| Below investment grade risk exposure | 43 | (2) | 2 years | Corporate Credit | | CCC+ | 43 | 1 |
| Basket credit default swaps [4] | | | | | | | | |
| Investment grade risk exposure | 1,265 | 7 | 4 years | Corporate Credit | | BBB+ | 345 | (2) |
| Below investment grade risk exposure | — | — | | Corporate Credit | | | — | — |
| Investment grade risk exposure | 503 | (14) | 6 years | CMBS Credit | | AAA- | 141 | 1 |
| Below investment grade risk exposure | 74 | (13) | 1 year | CMBS Credit | | CCC | 74 | 13 |
| Embedded credit derivatives | | | | | | | | |
| Investment grade risk exposure | 150 | 148 | 1 year | Corporate Credit | | A+ | — | — |
| Total [5] | \$ 2,153 | \$ 126 | | | | | \$ 718 | \$ 12 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Investments and Derivatives (continued)

As of December 31, 2014

| Credit Derivative type by derivative risk exposure | Notional Amount [2] | Fair Value | Weighted Average Years to Maturity | Underlying Referenced Credit Obligation(s) [1] | | Offsetting Notional Amount [3] | Offsetting Fair Value [3] |
|--|---------------------|---------------|------------------------------------|--|-----------------------|--------------------------------|---------------------------|
| | | | | Type | Average Credit Rating | | |
| Single name credit default swaps | | | | | | | |
| Investment grade risk exposure | \$ 212 | \$ 3 | 3 years | Corporate Credit/ Foreign Gov. | A- | \$ 163 | \$ (3) |
| Below investment grade risk exposure | 4 | — | 1 year | Corporate Credit | CCC | 4 | — |
| Basket credit default swaps [4] | | | | | | | |
| Investment grade risk exposure | 1,240 | 14 | 4 years | Corporate Credit | BBB+ | 667 | (6) |
| Below investment grade risk exposure | 9 | (1) | 5 years | Corporate Credit | BBB- | — | — |
| Investment grade risk exposure | 344 | (4) | 5 years | CMBS Credit | AA | 179 | 2 |
| Below investment grade risk exposure | 75 | (11) | 2 years | CMBS Credit | CCC+ | 75 | 11 |
| Embedded credit derivatives | | | | | | | |
| Investment grade risk exposure | 150 | 147 | 2 years | Corporate Credit | A | — | — |
| Total [5] | \$ 2,034 | \$ 148 | | | | \$ 1,088 | \$ 4 |

[1] The average credit ratings are based on availability and the midpoint of the applicable ratings among Moody's, S&P, Fitch and Morningstar. If no rating is available from a rating agency, then an internally developed rating is used.

[2] Notional amount is equal to the maximum potential future loss amount. These derivatives are governed by agreements, clearing house rules and applicable law which include collateral posting requirements. There is no additional specific collateral related to these contracts or recourse provisions included in the contracts to offset losses.

[3] The Company has entered into offsetting credit default swaps to terminate certain existing credit default swaps, thereby offsetting the future changes in value of, or losses paid related to, the original swap.

[4] Includes \$1.8 billion and \$1.7 billion as of December 31, 2015 and 2014, respectively, of notional amount on swaps of standard market indices of diversified portfolios of corporate and CMBS issuers referenced through credit default swaps. These swaps are subsequently valued based upon the observable standard market index.

[5] Excludes investments that contain an embedded credit derivative for which the Company has elected the fair value option. For further discussion, see the Fair Value Option section in Note 2 - Fair Value Measurements.

Derivative Collateral Arrangements

The Company enters into various collateral arrangements in connection with its derivative instruments, which require both the pledging and accepting of collateral. As of December 31, 2015 and 2014, the Company pledged cash collateral associated with derivative instruments with a fair value of \$173 and \$16, respectively, for which the collateral receivable has been primarily included within other assets on the Company's Consolidated Balance Sheets. As of December 31, 2015 and 2014, the Company also pledged securities collateral associated with derivative instruments with a fair value of \$873 and \$900, respectively, which have been included in fixed maturities on the Consolidated Balance Sheets. The counterparties have the right to sell or re-pledge these securities.

As of December 31, 2015 and 2014, the Company accepted cash collateral associated with derivative instruments of \$341 and \$33, respectively, which was invested and recorded in the Consolidated Balance Sheets in fixed maturities and short-term investments with corresponding amounts recorded in other liabilities. The Company also accepted securities collateral as of December 31, 2015 and 2014 with a fair value of \$100 and \$83, respectively, of which the Company has the ability to sell or repledge \$100 and \$83, respectively. As of December 31, 2015 and 2014, the Company had no repledged securities and did not sell any securities. In addition, as of December 31, 2015 and 2014, non-cash collateral accepted was held in separate custodial accounts and was not included in the Company's Consolidated Balance Sheets.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

4. Reinsurance

The Company cedes insurance to affiliated and unaffiliated insurers to enable the Company to manage capital and risk exposure. Such arrangements do not relieve the Company of its primary liability to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company. The Company's procedures include careful initial selection of its reinsurers, structuring agreements to provide collateral funds where necessary, and regularly monitoring the financial condition and ratings of its reinsurers. The Company has ceded reinsurance in connection with the sales of its Retirement Plans and Individual Life businesses in 2013 to MassMutual and Prudential, respectively.

Concurrent with the sale of HLIKK in 2014, HLIKK recaptured certain risks that had been reinsured to the Company and HLAI by terminating or modifying intercompany agreements. Upon closing, HLIKK became responsible for all liabilities of the recaptured business. HLAI has, however, continued to provide reinsurance for yen denominated fixed payout annuities approximating \$619 , as of December 31, 2015 . For further discussion of this transaction, see Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.

The cost of reinsurance related to long-duration contracts is accounted for over the life of the underlying reinsured policies using assumptions consistent with those used to account for the underlying policies. Insurance recoveries on ceded reinsurance agreements, which reduce death and other benefits, were \$1,094 , \$845 , and \$915 for the years ended December 31, 2015 , 2014, and 2013, respectively. In addition, the Company has reinsured a portion of the risk associated with U.S. variable annuities and the associated GMDB and GMWB riders.

The Company also maintains a reinsurance agreement with HLA, whereby the Company cedes both group life and group accident and health risk. Under this treaty, the Company ceded group life premium of \$64 , \$85 , and \$71 for the years ended December 31, 2015 , 2014, and 2013, respectively. The Company ceded accident and health premiums to HLA of \$129 , \$365 , and \$152 for the years ended December 31, 2015 , 2014, and 2013, respectively.

Effective April 1, 2014, HLAI, terminated its modco and coinsurance with funds withheld reinsurance agreement with WRR. Under this transaction, the Company ceded \$5 and \$31 for the years ended December 31, 2014 and 2013, respectively. For further information regarding the WRR reinsurance agreement, see Note 10 - Transactions with Affiliates of Notes to Consolidated Financial Statements.

Reinsurance Recoverables

Reinsurance recoverables include balances due from reinsurance companies and are presented net of an allowance for uncollectible reinsurance. Reinsurance recoverables include an estimate of the amount of gross losses and loss adjustment expense reserves that may be ceded under the terms of the reinsurance agreements, including incurred but not reported unpaid losses. The Company's estimate of losses and loss adjustment expense reserves ceded to reinsurers is based on assumptions that are consistent with those used in establishing the gross reserves for business ceded to the reinsurance contracts. The Company calculates its ceded reinsurance projection based on the terms of any applicable reinsurance agreements, including an estimate of how incurred but not reported losses will ultimately be ceded under reinsurance agreements. Accordingly, the Company's estimate of reinsurance recoverables is subject to similar risks and uncertainties as the estimate of the gross reserve for unpaid losses and loss adjustment expenses.

The Company's reinsurance recoverables are summarized as follows:

| Reinsurance Recoverables | As of December 31, | |
|---|---------------------------|------------------|
| | 2015 | 2014 |
| Future policy benefits and unpaid loss and loss adjustment expenses and other policyholder funds and benefits payable | | |
| Sold businesses (MassMutual and Prudential) | \$ 18,993 | \$ 18,606 |
| Other reinsurers | 1,506 | 1,447 |
| Gross reinsurance recoverables | \$ 20,499 | \$ 20,053 |

As of December 31, 2015 , the Company has reinsurance recoverables from MassMutual and Prudential of \$8.6 billion and \$10.4 billion , respectively. As of December 31, 2014, the Company has reinsurance recoverables from MassMutual and Prudential of \$8.6 billion and \$10.0 billion , respectively. The Company's obligations to its direct policyholders that have been reinsured to MassMutual and Prudential are secured by invested assets held in trust. Net of invested assets held in trust, as of December 31, 2015 , the Company has \$1.6 billion of reinsurance recoverables from Prudential representing approximately 20% of the Company's consolidated stockholder's equity. As of December 31, 2015 , the Company has no other reinsurance-related concentrations of credit risk greater than 10% of the Company's consolidated stockholder's equity.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

4. Reinsurance (continued)

No allowance for uncollectible reinsurance is required as of December 31, 2015 and December 31, 2014. The allowance for uncollectible reinsurance reflects management's best estimate of reinsurance cessions that may be uncollectible in the future due to reinsurers' unwillingness or inability to pay. The Company analyzes recent developments in commutation activity between reinsurers and cedants, recent trends in arbitration and litigation outcomes in disputes between reinsurers and cedants and the overall credit quality of the Company's reinsurers. Based on this analysis, the Company may adjust the allowance for uncollectible reinsurance or charge off reinsurer balances that are determined to be uncollectible. Where its contracts permit, the Company secures future claim obligations with various forms of collateral, including irrevocable letters of credit, secured trusts, funds held accounts and group-wide offsets.

Due to the inherent uncertainties as to collection and the length of time before reinsurance recoverables become due, it is possible that future adjustments to the Company's reinsurance recoverables, net of the allowance, could be required, which could have a material adverse effect on the Company's consolidated results of operations or cash flows in a particular quarter or annual period.

Insurance Revenues

The effect of reinsurance on earned premiums, fee income and other is as follows:

| | Year Ended December 31, | | |
|--|-------------------------|-----------------|-----------------|
| | 2015 | 2014 | 2013 |
| Gross earned premiums, fee income and other | \$ 2,877 | \$ 3,228 | \$ 3,502 |
| Reinsurance assumed | 113 | 74 | 13 |
| Reinsurance ceded | (1,801) | (2,060) | (1,869) |
| Net earned premiums, fee income and other | \$ 1,189 | \$ 1,242 | \$ 1,646 |

5. Deferred Policy Acquisition Costs

Changes in the DAC balance are as follows:

| | For the years ended December 31, | | |
|--|----------------------------------|---------------|-----------------|
| | 2015 | 2014 | 2013 |
| Balance, beginning of period | \$ 521 | \$ 689 | \$ 3,072 |
| Deferred costs | 7 | 14 | 16 |
| Amortization — DAC | (82) | (110) | (124) |
| Amortization — Unlock benefit (charge), pre-tax | 13 | (96) | (104) |
| Amortization — DAC related to business dispositions [1] [2] | — | — | (2,229) |
| Adjustments to unrealized gains and losses on securities AFS and other | 83 | 24 | 58 |
| Balance, end of period | \$ 542 | \$ 521 | \$ 689 |

[1] Includes accelerated amortization of \$352 and \$2,374 recognized upon the sale of the Retirement Plans and Individual Life businesses, respectively, in 2013. For further information, see Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

[2] Includes previously unrealized gains on securities AFS of \$148 and \$349 recognized upon the sale of the Retirement Plans and Individual Life businesses, respectively, in 2013.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

6 . Separate Accounts, Death Benefits and Other Insurance Benefit Features

Changes in the gross GMDB/GMWB and universal life secondary guarantee benefits are as follows:

| | GMDB/GMWB [1] | Universal Life Secondary Guarantees |
|---|---------------|---|
| Liability balance as of January 1, 2015 | \$ 812 | \$ 2,041 |
| Incurred [2] | 163 | 272 |
| Paid | (112) | — |
| Liability balance as of December 31, 2015 | \$ 863 | \$ 2,313 |
| Reinsurance recoverable asset, as of January 1, 2015 | \$ 480 | \$ 2,041 |
| Incurred [2] | 132 | 272 |
| Paid | (89) | — |
| Reinsurance recoverable asset, as of December 31, 2015 | \$ 523 | \$ 2,313 |
| | | |
| | GMDB/GMWB [1] | Universal Life Secondary Guarantees |
| Liability balance as of January 1, 2014 | \$ 849 | \$ 1,802 |
| Incurred [2] | 73 | 239 |
| Paid | (110) | — |
| Liability balance as of December 31, 2014 | \$ 812 | \$ 2,041 |
| Reinsurance recoverable asset, as of January 1, 2014 | \$ 533 | \$ 1,802 |
| Incurred [2] | 32 | 239 |
| Paid | (85) | — |
| Reinsurance recoverable asset, as of December 31, 2014 | \$ 480 | \$ 2,041 |

[1] These liability balances include all GMDB benefits, plus the life-contingent portion of GMWB benefits in excess of the return of the GRB. GMWB benefits up to the return of the GRB are embedded derivatives held at fair value and are excluded from these balances.

[2] Includes the portion of assessments established as additions to reserves as well as changes in estimates affecting the reserves.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

6. Separate Accounts, Death Benefits and Other Insurance Benefit Features (continued)

The following table provides details concerning GMDB/GMWB exposure as of December 31, 2015 :

| Account Value by GMDB/GMWB Type | | | | |
|--|--------------------------|--------------------------------|--|--|
| Maximum anniversary value ("MAV") [1] | Account Value ("AV") [8] | Net amount at Risk ("NAR") [9] | Retained Net Amount at Risk ("RNAR") [9] | Weighted Average Attained Age of Annuitant |
| MAV only | \$ 14,540 | \$ 2,743 | \$ 477 | 70 |
| With 5% rollup [2] | 1,257 | 227 | 77 | 71 |
| With Earnings Protection Benefit Rider ("EPB") [3] | 3,697 | 490 | 77 | 69 |
| With 5% rollup & EPB | 487 | 107 | 23 | 72 |
| Total MAV | 19,981 | 3,567 | 654 | |
| Asset Protection Benefit ("APB") [4] | 11,707 | 519 | 346 | 69 |
| Lifetime Income Benefit ("LIB") – Death Benefit [5] | 516 | 9 | 9 | 69 |
| Reset [6] (5-7 years) | 2,582 | 32 | 32 | 70 |
| Return of Premium ("ROP") [7] /Other | 9,459 | 71 | 64 | 68 |
| Subtotal Variable Annuity with GMDB/GMWB [10] | \$ 44,245 | \$ 4,198 | \$ 1,105 | 69 |
| Less: General Account Value with GMDB/GMWB | 3,822 | | | |
| Subtotal Separate Account Liabilities with GMDB | 40,423 | | | |
| Separate Account Liabilities without GMDB | 79,688 | | | |
| Total Separate Account Liabilities | \$ 120,111 | | | |

[1] MAV GMDB is the greatest of current AV, net premiums paid and the highest AV on any anniversary before age 80 years (adjusted for withdrawals).

[2] Rollup GMDB is the greatest of the MAV, current AV, net premium paid and premiums (adjusted for withdrawals) accumulated at generally 5% simple interest up to the earlier of age 80 years or 100% of adjusted premiums.

[3] EPB GMDB is the greatest of the MAV, current AV, or contract value plus a percentage of the contract's growth. The contract's growth is AV less premiums net of withdrawals, subject to a cap of 200% of premiums net withdrawals.

[4] APB GMDB is the greater of current AV or MAV, not to exceed current AV plus 25% times the greater of net premiums and MAV (each adjusted for premiums in the past 12 months).

[5] LIB GMDB is the greatest of current AV; net premiums paid; or for certain contracts, a benefit amount generally based on market performance that ratchets over time.

[6] Reset GMDB is the greatest of current AV, net premiums paid and the most recent five to seven year anniversary AV before age 80 years (adjusted for withdrawals).

[7] ROP GMDB is the greater of current AV and net premiums paid.

[8] AV includes the contract holder's investment in the separate account and the general account.

[9] NAR is defined as the guaranteed benefit in excess of the current AV. RNAR represents NAR reduced for reinsurance. NAR and RNAR are highly sensitive to equity market movements and increase when equity markets decline.

[10] Some variable annuity contracts with GMDB also have a life-contingent GMWB that may provide for benefits in excess of the return of the GRB. Such contracts included in this amount have \$7.0 billion of total account value and weighted average attained age of 71 years. There is no NAR or retained NAR related to these contracts.

The account balances of contracts with guarantees were invested in variable separate accounts as follows:

| Asset type | December 31, 2015 | | December 31, 2014 | |
|--|-------------------|---------------|-------------------|---------------|
| Equity securities (including mutual funds) | \$ | 36,970 | \$ | 44,786 |
| Cash and cash equivalents | | 3,453 | | 4,066 |
| Total | \$ | 40,423 | \$ | 48,852 |

As of December 31, 2015 and December 31, 2014, approximately 17% of the equity securities (including mutual funds), in the preceding table were funds invested in fixed income securities and approximately 83% were funds invested in equity securities.

For further information on guaranteed living benefits that are accounted for at fair value, such as GMWB, see Note 2 - Fair Value Measurements of Notes to Consolidated Financial Statements.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

7. Debt

Collateralized Advances

The Company is a member of the Federal Home Loan Bank of Boston (“FHLBB”). Membership allows the Company access to collateralized advances, which may be used to support various spread-based business and enhance liquidity management. FHLBB membership requires the company to own member stock and advances require the purchase of activity stock. The amount of advances that can be taken are dependent on the asset types pledged to secure the advances. The CTDOI will permit the Company to pledge up to \$1.2 billion in qualifying assets to secure FHLBB advances for 2016. The amount of advances that can be taken are dependent on the asset types pledged to secure the advances. The pledge limit is recalculated annually based on statutory admitted assets and capital and surplus. The Company would need to seek the prior approval of the CTDOI in order to exceed these limits. As of December 31, 2015, the Company had no advances outstanding under the FHLBB facility.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

8. Income Taxes

The provision (benefit) for income taxes consists of the following:

| | For the years ended December 31, | | |
|-------------------------------------|----------------------------------|---------------|--------------|
| | 2015 | 2014 | 2013 |
| Income Tax Expense (Benefit) | | | |
| Current - U.S. Federal | \$ 36 | \$ (339) | \$ (208) |
| Deferred - U.S. Federal | (6) | 523 | 257 |
| Total income tax expense | \$ 30 | \$ 184 | \$ 49 |

Deferred tax assets and liabilities on the consolidated balance sheets represent the tax consequences of differences between the financial reporting and tax basis of assets and liabilities. Deferred tax assets (liabilities) include the following:

| | As of December 31, | |
|--|--------------------|-----------------|
| | 2015 | 2014 |
| Deferred Tax Assets | | |
| Tax basis deferred policy acquisition costs | \$ 119 | \$ 124 |
| Unearned premium reserve and other underwriting related reserves | 4 | 12 |
| Investment-related items | 524 | 1,094 |
| Insurance product derivatives | 90 | 44 |
| Net operating loss carryover | 1,166 | 1,116 |
| Alternative minimum tax credit | 232 | 246 |
| Foreign tax credit carryover | 122 | 58 |
| Other | 16 | — |
| Total Deferred Tax Assets | 2,273 | 2,694 |
| Net Deferred Tax Assets | 2,273 | 2,694 |
| Deferred Tax Liabilities | | |
| Financial statement deferred policy acquisition costs and reserves | (220) | (585) |
| Net unrealized gain on investments | (432) | (816) |
| Employee benefits | (40) | (39) |
| Depreciable and amortizable assets | — | (1) |
| Other | — | (16) |
| Total Deferred Tax Liabilities | (692) | (1,457) |
| Net Deferred Tax Asset | \$ 1,581 | \$ 1,237 |

The Company has a current income tax receivable of \$276 and \$231 as of December 31, 2015 and 2014, respectively.

If the Company were to follow a “separate entity” approach, the current tax benefit related to any of the Company’s tax attributes realized by virtue of its inclusion in The Hartford’s consolidated tax return would have been recorded directly to equity rather than income. These benefits were \$0, \$0 and \$0 for the years ended December 31, 2015, 2014 and 2013, respectively.

The Company believes it is more likely than not the deferred tax assets will be fully realized. Consequently no valuation allowance has been provided. In assessing the need for a valuation allowance, management considered future taxable temporary difference reversals, future taxable income exclusive of reversing temporary differences and carryovers, taxable income in open carry back years and other tax planning strategies. From time to time, tax planning strategies could include holding a portion of debt securities with market value losses until recovery, altering the level of tax exempt securities held, making investments which have specific tax characteristics, and business considerations such as asset-liability matching.

Net Operating Loss Carryover

As of December 31, 2015 and December 31, 2014, the net deferred tax asset included the expected tax benefit attributable to net operating losses of \$3,333 and \$3,189, respectively. If unutilized, \$3,331 of the losses expire from 2023- 2033. Utilization of these loss carryovers is dependent upon the generation of sufficient future taxable income.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

8. Income Taxes (continued)

Most of the net operating loss carryover originated from the Company's U.S. annuity business, including from the hedging program. Given the continued runoff of the U.S. fixed and variable annuity business, the exposure to taxable losses is significantly lessened. Accordingly, given the expected future consolidated group earnings which includes earnings from non-life companies in the group, the Company believes sufficient taxable income will be generated in the future to utilize its net operating loss carryover. Although the Company believes there will be sufficient future taxable income to fully recover the remainder of the loss carryover, the Company's estimate of the likely realization may change over time.

Alternative Minimum Tax Credit and Foreign Tax Credit Carryover

As of December 31, 2015 and December 31, 2014, the net deferred tax asset included the expected tax benefit attributable to alternative minimum tax credit carryover of \$232 and \$246 and foreign tax credit carryover of \$122 and \$58 respectively. The alternative minimum tax credits have no expiration date and the foreign tax credit carryover expire from 2019 to 2024. These credits are available to offset regular federal income taxes from future taxable income and although the Company believes there will be sufficient future regular federal consolidated group taxable income, there can be no certainty that future events will not affect the ability to utilize the credits. Additionally, the use of the foreign tax credits generally depends on the generation of sufficient taxable income to first utilize all of the U.S. net operating loss carryover. However, the Company has identified certain investments which allow for utilization of the foreign tax credits without first using the net operating loss carryover. Consequently, the Company believes it is more likely than not the foreign tax credit carryover will be fully realized. Accordingly, no valuation allowance has been provided on either the alternative minimum tax carryover or foreign tax credit carryover.

The Company or one or more of its subsidiaries files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. The Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations for years prior to 2007. The audit of the years 2007-2011 were concluded in 2015, with no material impact on the consolidated financial condition or results of operations. The federal audit of the years 2012 and 2013 began in March 2015 and is expected to be completed in 2016.

Management believes that adequate provision has been made in the financial statements for any potential assessments that may result from tax examinations and other tax-related matters for all open tax years.

The Company's unrecognized tax benefits are settled with the parent consistent with the terms of a tax sharing agreement. The Company's effective tax rate for the year ended December 31, 2015 reflects a \$36 net reduction in the provision for income taxes from intercompany tax settlements.

A reconciliation of the tax provision at the U.S. Federal statutory rate to the provision for income taxes is as follows:

| | For the years ended December 31, | | |
|--|---|---------------|--------------|
| | 2015 | 2014 | 2013 |
| Tax provision at the U.S. federal statutory rate | \$ 186 | \$ 301 | \$ 196 |
| Dividends received deduction ("DRD") | (152) | (109) | (135) |
| Foreign related investments | (3) | (8) | (7) |
| Other | (1) | — | (5) |
| Provision for income taxes | \$ 30 | \$ 184 | \$ 49 |

The separate account DRD is estimated for the current year using information from the most recent return, adjusted for current year equity market performance and other appropriate factors, including estimated levels of corporate dividend payments and level of policy owner equity account balances. The actual current year DRD can vary from estimates based on, but not limited to, changes in eligible dividends received in the mutual funds, amounts of distributions from these mutual funds, amounts of short-term capital gains at the mutual fund level and the Company's taxable income before the DRD.

9. Commitments and Contingencies

Contingencies Relating to Corporate Litigation and Regulatory Matters

Management evaluates each contingent matter separately. A loss is recorded if probable and reasonably estimable. Management establishes reserves for these contingencies at its "best estimate," or, if no one number within the range of possible losses is more probable than any other, the Company records an estimated liability at the low end of the range of losses.

Litigation

The Company is involved in claims litigation arising in the ordinary course of business with respect to life, disability and accidental death and dismemberment insurance policies and with respect to annuity contracts. The Company accounts for such activity through the establishment of reserves for future policy benefits and unpaid loss and loss adjustment expense reserves. Management expects that the ultimate liability, if any, with respect to such ordinary-course claims litigation, after consideration of provisions made for potential losses and costs of defense, will not be material to the consolidated financial condition, results of operations or cash flows of the Company.

The Company is also involved in other kinds of legal actions, some of which assert claims for substantial amounts. Such actions have alleged, for example, bad faith in the handling of insurance claims and improper sales practices in connection with the sale of insurance and investment products. Some of these actions also seek punitive damages. Management expects that the ultimate liability, if any, with respect to such lawsuits, after consideration of provisions made for estimated losses, will not be material to the consolidated financial condition of the Company. Nonetheless, given the large or indeterminate amounts sought in certain of these actions, and the inherent unpredictability of litigation, it is possible that an adverse outcome in certain matters could, from time to time, have a material adverse effect on the Company's consolidated results of operations or cash flows in particular quarterly or annual periods.

Lease Commitments

The rent paid to Hartford Fire Insurance Company ("Hartford Fire") for operating leases was \$9 , \$7 and \$2 for the years ended December 31, 2015 , 2014 and 2013 , respectively. Future minimum lease commitments as of December 31, 2015 are immaterial.

Unfunded Commitments

As of December 31, 2015 , the Company has outstanding commitments totaling \$378 , of which \$299 is committed to fund limited partnership and other alternative investments, which may be called by the partnership during the commitment period to fund the purchase of new investments and partnership expenses. Additionally, \$76 of the outstanding commitments are related to various funding obligations associated with private placement securities. The remaining outstanding commitments of \$3 relate to mortgage loans the Company is expecting to fund in the first half of 2016.

Guaranty Fund and Other Insurance-related Assessments

In all states, insurers licensed to transact certain classes of insurance are required to become members of a guaranty fund. In most states, in the event of the insolvency of an insurer writing any such class of insurance in the state, members of the funds are assessed to pay certain claims of the insolvent insurer. A particular state's fund assesses its members based on their respective written premiums in the state for the classes of insurance in which the insolvent insurer was engaged. Assessments are generally limited for any year to one or two percent of premiums written per year depending on the state.

Liabilities for guaranty funds and other insurance-related assessments are accrued when an assessment is probable, when it can be reasonably estimated, and when the event obligating the Company to pay an imposed or probable assessment has occurred. Liabilities for guaranty funds and other insurance-related assessments are not discounted and are included as part of other liabilities in the Consolidated Balance Sheets. As of December 31, 2015 and 2014 , the liability balance was \$15 . As of December 31, 2015 and 2014 , \$27 related to premium tax offsets was included in other assets.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

9. Commitments and Contingencies (continued)

Derivative Commitments

Certain of the Company's derivative agreements contain provisions that are tied to the financial strength ratings, as set by nationally recognized statistical agencies, of the individual legal entity that entered into the derivative agreement. If the legal entity's financial strength were to fall below certain ratings, the counterparties to the derivative agreements could demand immediate and ongoing full collateralization and in certain instances demand immediate settlement of all outstanding derivative positions traded under each impacted bilateral agreement. The settlement amount is determined by netting the derivative positions transacted under each agreement. If the termination rights were to be exercised by the counterparties, it could impact the legal entity's ability to conduct hedging activities by increasing the associated costs and decreasing the willingness of counterparties to transact with the legal entity. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that are in a net liability position as of December 31, 2015, was \$870. Of this \$870 the legal entities have posted collateral of \$998 in the normal course of business. In addition, the Company has posted collateral of \$34 associated with a customized GMWB derivative. Based on derivative market values as of December 31, 2015, a downgrade of one or two levels below the current financial strength ratings by either Moody's or S&P would not require additional assets to be posted as collateral. These collateral amounts could change as derivative market values change, as a result of changes in our hedging activities or to the extent changes in contractual terms are negotiated. The nature of the collateral that we would post, if required, would be primarily in the form of U.S. Treasury bills, U.S. Treasury notes and government agency securities.

10 . Transactions with Affiliates

Parent Company Transactions

Transactions of the Company with Hartford Fire, Hartford Holdings Inc. ("HHI") and its affiliates relate principally to tax settlements, reinsurance, insurance coverage, rental and service fees, payment of dividends and capital contributions. In addition, an affiliated entity purchased annuity contracts from the Company to fund structured settlement periodic payment obligations as part of claims settlements with The Hartford's property and casualty subsidiaries and self-insured entities. As of December 31, 2015 and 2014 , the Company had \$53 and \$54 , respectively, of reserves for claim annuities purchased by affiliated entities. For the years ended December 31, 2015 , 2014 and 2013 , the Company recorded earned premiums of \$3 , \$3 , and \$8 for these intercompany claim annuities. Reserves for annuities issued by the Company to The Hartford's property and casualty subsidiaries to fund structured settlement payments where the claimant has not released The Hartford's property and casualty subsidiaries of their primary obligation totaled \$746 and \$776 as of December 31, 2015 and 2014 , respectively.

Substantially all general insurance expenses related to the Company, including rent and employee benefit plan expenses are initially paid by The Hartford. Expenses are allocated to the Company using specific identification if available, or other applicable methods that would include a blend of revenue, expense and capital.

The Company has issued a guarantee to retirees and vested terminated employees ("Retirees") of The Hartford Retirement Plan for Employees ("the Plan") who retired or terminated prior to January 1, 2004 . The Plan is sponsored by The Hartford. The guarantee is an irrevocable commitment to pay all accrued benefits which the Retiree or the Retiree's designated beneficiary is entitled to receive under the Plan in the event the Plan assets are insufficient to fund those benefits and The Hartford is unable to provide sufficient assets to fund those benefits. The Company believes that the likelihood that payments will be required under this guarantee is remote.

In 1990 , Hartford Fire guaranteed the obligations of the Company with respect to life, accident and health insurance and annuity contracts issued after January 1, 1990 . The guarantee was issued to provide an increased level of security to potential purchasers of the Company's products. Although the guarantee was terminated in 1997 , it still covers policies that were issued from 1990 to 1997 . As of December 31, 2015 and 2014 , no recoverables have been recorded for this guarantee, as the Company was able to meet these policyholder obligations.

Reinsurance Assumed from Affiliates

The Company and HLAI formerly reinsured certain fixed annuity products and variable annuity product GMDB, GMIB, GMWB and GMAB riders from HLIKK, a former Japanese affiliate that was sold on June 30, 2014 to ORIX Life Insurance Corporation. As of December 31, 2013 , \$2.6 billion of fixed annuity account value had been assumed by the Company and HLAI.

Concurrent with the sale of HLIKK in 2014, HLIKK recaptured certain risks that had been reinsured to the Company and HLAI by terminating or modifying intercompany agreements. This recapture resulted in the Company and HLAI transferring approximately \$1.6 billion of assets supporting the recaptured reserves. The Company recognized a loss on this recapture of \$213 . Upon closing, HLIKK is responsible for all liabilities of the recaptured business.

HLAI continues to provide reinsurance for yen denominated fixed payout annuities approximating \$619 and \$763 as of December 31, 2015 and 2014, respectively.

Reinsurance Ceded to Affiliates

The Company also maintains a reinsurance agreement with HLA, whereby the Company cedes both group life and group accident and health risk. Under this treaty, the Company ceded group life premium of \$64 , \$85 , and \$71 for the years ended December 31, 2015 , 2014, and 2013, respectively. The Company ceded accident and health premiums to HLA of \$129 , 365 , and \$152 for the years ended December 31, 2015 , 2014, and 2013, respectively.

Effective April 1, 2014 , HLAI, terminated its modco and coinsurance with funds withheld reinsurance agreement with WRR, following receipt of approval from the CTDOI and Vermont Department of Financial Regulation. As a result, the Company reclassified \$310 in aggregate reserves for annuity contracts from funds withheld within Other liabilities to Other policyholder funds and benefits payable. The Company recognized a gain of \$213 in the year ended December 31, 2014 resulting from the termination of derivatives associated with the reinsurance transaction. On April 30, 2014 , The Hartford dissolved WRR which resulted in WRR paying off a \$655 surplus note and returning \$367 in capital to The Hartford, all of which was contributed as capital to HLAI to support the recaptured risks.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

10. Transactions with Affiliates (continued)

The impact of the modco and coinsurance with funds withheld reinsurance agreement with WRR on the Company's Consolidated Statements of Operations prior to termination in 2014 was as follows:

| | For the years ended December 31, | |
|---|----------------------------------|-----------------|
| | 2014 | 2013 |
| Earned premiums | \$ (5) | \$ (31) |
| Net realized losses [1] | (103) | (1,665) |
| Total revenues | (108) | (1,696) |
| Benefits, losses and loss adjustment expenses | (1) | (8) |
| Insurance operating costs and other expenses | (4) | (1,158) |
| Total expenses | (5) | (1,166) |
| Loss before income taxes | (103) | (530) |
| Income tax benefit | (36) | (185) |
| Net loss | \$ (67) | \$ (345) |

[1] Amounts represent the change in valuation of the derivative associated with this transaction.

Champlain Life Reinsurance Company

Effective November 1, 2007, HLAI entered into a modco and coinsurance with funds withheld agreement with Champlain Life Reinsurance Company ("Champlain Life"), an affiliate captive insurance company, to provide statutory surplus relief for certain life insurance policies. The agreement was accounted for as a financing transaction in accordance with U.S. GAAP. Simultaneous with the sale of the Individual Life business to Prudential, HLAI recaptured the business assumed by Champlain Life. As a result, on January 2, 2013, HLAI was relieved of its funds withheld obligation to Champlain Life of \$691; HLAI paid a recapture fee of \$347 to Champlain Life; and, HLAI recognized a pre-tax gain of \$344 (\$224 after-tax). HLAI simultaneously ceded the recaptured reserves to Prudential and recognized the gain on recapture as part of the reinsurance loss on disposition.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

11 . Statutory Results

The domestic insurance subsidiaries of the Company prepare their statutory financial statements in conformity with statutory accounting practices prescribed or permitted by the applicable state insurance department which vary materially from U.S. GAAP. Prescribed statutory accounting practices include publications of the National Association of Insurance Commissioners ("NAIC"), as well as state laws, regulations and general administrative rules. The differences between statutory financial statements and financial statements prepared in accordance with U.S. GAAP vary between domestic and foreign jurisdictions. The principal differences are that statutory financial statements do not reflect deferred policy acquisition costs and limit deferred income taxes, predominately use interest rate and mortality assumptions prescribed by the NAIC for life benefit reserves, generally carry bonds at amortized cost and present reinsurance assets and liabilities net of reinsurance. For reporting purposes, statutory capital and surplus is referred to collectively as "statutory capital".

Statutory net income and statutory capital are as follows:

| | For the years ended December 31, | | |
|-------------------------------|----------------------------------|----------|----------|
| | 2015 | 2014 | 2013 |
| Combined statutory net income | \$ 371 | \$ 132 | \$ 1,290 |
| Statutory capital | \$ 4,939 | \$ 5,564 | \$ 5,005 |

Statutory accounting practices do not consolidate the net income (loss) of subsidiaries as performed under U.S. GAAP. The combined statutory net income above represents the total statutory net income of the Company, and its other insurance subsidiaries.

Regulatory Capital Requirements

The Company's U.S. insurance companies' states of domicile impose risk-based capital ("RBC") requirements. The requirements provide a means of measuring the minimum amount of statutory capital appropriate for an insurance company to support its overall business operations based on its size and risk profile. Regulatory compliance is determined by a ratio of a company's total adjusted capital ("TAC") to its authorized control level RBC ("ACL RBC"). Companies below specific trigger points or ratios are classified within certain levels, each of which requires specified corrective action. The minimum level of TAC before corrective action commences ("Company Action Level") is two times the ACL RBC. The adequacy of a company's capital is determined by the ratio of a company's TAC to its Company Action Level, known as the "RBC ratio". The Company and all of its operating insurance subsidiaries had RBC ratios in excess of the minimum levels required by the applicable insurance regulations. The RBC ratios for the Company and its principal life insurance operating subsidiaries were all in excess of 400% of their Company Action Levels as of December 31, 2015 and 2014. The reporting of RBC ratios is not intended for the purpose of ranking any company, or for use in connection with any marketing, advertising of promotional activities.

Dividends and Capital Contributions

Dividends to the Company from its insurance subsidiaries are restricted, as is the ability of the Company to pay dividends to its parent company. Future dividend decisions will be based on, and affected by, a number of factors, including the operating results and financial requirements of the Company on a stand-alone basis and the impact of regulatory restrictions.

The payment of dividends by Connecticut-domiciled insurers is limited under the insurance holding company laws of Connecticut. These laws require notice to and approval by the state insurance commissioner for the declaration or payment of any dividend, which, together with other dividends or distributions made within the preceding twelve months, exceeds the greater of (i) 10% of the insurer's policyholder surplus as of December 31 of the preceding year or (ii) net income (or net gain from operations) for the twelve-month period ending on the thirty-first day of December last preceding, in each case determined under statutory insurance accounting principles. In addition, if any dividend of a Connecticut-domiciled insurer exceeds the insurer's earned surplus, it requires the prior approval of the CTDOI. The insurance holding company laws of the other jurisdictions in which the Company's insurance subsidiaries are incorporated (or deemed commercially domiciled) generally contain similar (although in certain instances somewhat more restrictive) limitations on the payment of dividends.

In 2015 the Company paid dividends of approximately \$1.0 billion to its parent, based on the approval of the CTDOI.

The Company's subsidiaries are permitted to pay up to a maximum of approximately \$415 in dividends without prior approval from the applicable insurance commissioner. On January 29, 2016, Hartford Life and Annuity paid an extraordinary dividend of \$500 to the Company which was subsequently paid as an extraordinary dividend to HLI. As a result of this dividend, the Company has no ordinary dividend capacity remaining for the year.

The Company anticipates paying an additional \$250 of extraordinary dividends to its parent during 2016, subject to regulatory approval.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

11. Statutory Results (continued)

Year Ended December 31, 2014

On January 30, 2014, The Company received approval from the CTDOI for HLAI and HLIC to dividend approximately \$800 of cash and invested assets to HLA and this dividend was paid on February 27, 2014. All of the issued and outstanding equity of the Company was then distributed from HLA to Hartford Life, Inc ("HLI"). On April 30, 2014, The Hartford contributed capital of approximately \$1.0 billion to HLAI in connection with the dissolution of WRR. For further discussion of transactions with WRR, see Note 10 - Transactions with Affiliates. On July 8, 2014, The Hartford received approval from the CTDOI for HLAI to dividend approximately \$500 to HLIC. This dividend was paid on July 15, 2014 and then distributed to HLI.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

12 . Discontinued Operations and Business Dispositions

Discontinued Operations

Sale of Hartford Life International Limited ("HLIL")

On December 12, 2013, the Company completed the sale of all of the issued and outstanding equity of HLIL, an indirect wholly-owned subsidiary of the Company, in a cash transaction to Columbia Insurance Company, a Berkshire Hathaway company, for approximately \$285 . At closing, HLIL's sole asset was its subsidiary, Hartford Life Limited ("HLL"), a Dublin-based company that sold variable annuities in the U.K. from 2005 to 2009. The sale transaction resulted in an after-tax loss of \$51 upon disposition in the year ended December 31, 2013. The operations of the Company's U.K. variable annuity business meet the criteria for reporting as discontinued operations.

The results of operations reflected as discontinued operations in the Consolidated Statements of Operations, consisting of amounts related to HLIL, is as follows:

| | For the year ended December 31, | |
|--|--|-------------|
| | 2013 | |
| Revenues | | |
| Earned Premiums | \$ | (23) |
| Fee income and other | | 14 |
| Net investment income | | |
| Securities available-for-sale and other | | (3) |
| Equity securities, trading | | 139 |
| Total net investment income | | 136 |
| Net realized capital gains (losses) | | (14) |
| Total revenues | | 113 |
| Benefits, losses and expenses | | |
| Benefits, losses and loss adjustment expenses | | 2 |
| Benefits, losses and loss adjustment expenses - returns credited on international variable annuity | | 139 |
| Amortization of DAC | | — |
| Insurance operating costs and other expenses | | (33) |
| Total benefits, losses and expenses | | 108 |
| Income before income taxes | | 5 |
| Income tax benefit | | (5) |
| Income from operations of discontinued operations, net of tax | | 10 |
| Net realized capital losses on disposal, net of tax | | (51) |
| Income (loss) from discontinued operations, net of tax | \$ | (41) |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

12 . Discontinued Operations and Business Dispositions (continued)

Business Dispositions

Sale of Retirement Plans

On January 1, 2013, HLI completed the sale of its Retirement Plans business to MassMutual for a ceding commission of \$355 . The business sold included products and services to corporations pursuant to Section 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"), and products and services to municipalities and not-for-profit organizations under Sections 457 and 403(b) of the Code, collectively referred to as government plans. The sale was structured as a reinsurance transaction and resulted in an after-tax gain of \$45 for the year ended December 31, 2013. The Company recognized \$565 in reinsurance loss on disposition including a reduction in goodwill of \$87 , offset by \$634 in realized capital gains for a \$69 impact to income, pre-tax.

Upon closing, the Company reinsured \$9.2 billion of policyholder liabilities and \$26.3 billion of separate account liabilities under an indemnity reinsurance arrangement. The reinsurance transaction does not extinguish the Company's primary liability on the insurance policies issued under the Retirement Plans business. The Company also transferred invested assets with a carrying value of \$9.3 billion , net of the ceding commission, to MassMutual and recognized other non-cash decreases in assets totaling \$100 relating to deferred acquisition costs, deferred income taxes, goodwill, and other assets associated with the disposition. The Company continued to sell retirement plans during the transition period which ended on June 30, 2014. MassMutual has assumed all expenses and risks for these sales through the reinsurance agreement.

Sale of Individual Life

On January 2, 2013 HLI completed the sale of its Individual Life insurance business to Prudential for consideration of \$615 , consisting primarily of a ceding commission, of which \$590 is attributable to the Company. The business sold included variable universal life, universal life, and term life insurance. The sale was structured as a reinsurance transaction and resulted in a loss on business disposition in 2013 consisting of a reinsurance loss partially offset by realized capital gains and a goodwill impairment loss of \$61 , pre-tax, in 2012.

Upon closing the Company recognized an additional reinsurance loss on disposition of \$927 , including a reduction in goodwill of \$163 offset by realized capital gains of \$927 for a \$0 impact on income, pre-tax. In addition, the Company reinsured \$8.3 billion of policyholder liabilities and \$5.3 billion of separate account liabilities under indemnity reinsurance arrangements. The reinsurance transaction does not extinguish the Company's primary liability under the Individual Life business. The Company also transferred invested assets with a carrying value of \$7.6 billion , exclusive of \$1.4 billion assets supporting the modified coinsurance agreement, net of cash transferred in place of short-term investments, to Prudential and recognized other non-cash decreases in assets totaling \$1.8 billion relating to deferred acquisition costs, deferred income taxes, goodwill and other assets, and other non-cash decreases in liabilities totaling \$1.9 billion relating to other liabilities associated with the disposition. The Company continued to sell life insurance products and riders during the transition period which ended on June 30, 2014. Prudential has assumed all expenses and risk for these sales through the reinsurance agreement.

Composition of Invested Assets Transferred

The following table summarizes invested assets transferred by the Company in 2013 in connection with the sale of the Retirement Plans and Individual Life businesses.

| | Carrying Value | |
|--|--------------------------------|---------------|
| | As of December 31, 2012 | |
| Fixed maturities, at fair value (amortized cost of \$13,596) [1] | \$ | 15,015 |
| Equity securities, AFS, at fair value (cost of \$27) [2] | | 28 |
| Fixed maturities, at fair value using the FVO [3] | | 16 |
| Mortgage loans (net of allowances for loan losses of \$1) | | 1,288 |
| Policy loans, at outstanding balance | | 542 |
| Total invested assets transferred | \$ | 16,889 |

[1] Includes \$14.4 billion and \$657 of securities in level 2 and 3 of the fair value hierarchy, respectively.

[2] All equity securities transferred are included in level 2 of the fair value hierarchy.

[3] All FVO securities transferred are included in level 3 of the fair value hierarchy.

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

13 . Restructuring and Other Costs

The Company has completed the restructuring activities initiated in 2011 and 2012. Termination benefits related to workforce reductions and lease and other contract terminations have been accrued through December 31, 2015. For related discussion of the Company's business disposition transactions, see Note 12 - Discontinued Operations and Business Dispositions of Notes to Consolidated Financial Statements.

The Company has completed substantially all of its restructuring activities related to consolidation of its real estate operations initiated in 2013 consistent with the Company's strategic business realignment.

Restructuring and other costs, pre-tax incurred by the Company in connection with these activities were as follows:

| | For the years ended December 31, | | |
|--|----------------------------------|--------------|--------------|
| | 2015 | 2014 | 2013 |
| Severance benefits and related costs | \$ 1 | \$ 8 | \$ 7 |
| Professional fees | — | — | 15 |
| Asset impairment charges | — | 9 | 5 |
| Total restructuring and other costs | \$ 1 | \$ 17 | \$ 27 |

The tables below provide roll-forwards for accrued restructuring and other costs included in other liabilities in the Consolidated Balance Sheets.

| | For the year ended December 31, 2015 | | | |
|-------------------------------------|---|-------------------|-----------------------------|--|
| | Severance Benefits and Related Costs | Professional Fees | Asset Impairment Charges | Total Restructuring and Other Costs |
| Balance, beginning of period | \$ 4 | \$ — | \$ — | \$ 4 |
| Accruals/provisions | 1 | — | — | 1 |
| Payments/write-offs | (5) | — | — | (5) |
| Balance, end of period | \$ — | \$ — | \$ — | \$ — |

| | For the year ended December 31, 2014 | | | |
|-------------------------------------|---|-------------------|-----------------------------|--|
| | Severance Benefits and Related Costs | Professional Fees | Asset Impairment Charges | Total Restructuring and Other Costs |
| Balance, beginning of period | \$ 1 | \$ — | \$ — | \$ 1 |
| Accruals/provisions | 8 | — | 9 | 17 |
| Payments/write-offs | (5) | — | (9) | (14) |
| Balance, end of period | \$ 4 | \$ — | \$ — | \$ 4 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

14 . Changes in and Reclassifications From Accumulated Other Comprehensive Income

Changes in AOCI, net of tax, by component consist of the following:

For the year ended December 31, 2015

| | Changes in | | | |
|--------------------------------|--------------------------------------|---|--|---------------------|
| | Net Unrealized Gain on Securities | Net Gain on Cash Flow Hedging Instruments | Foreign Currency Translation Adjustments | AOCI, net of tax |
| Beginning balance | \$ 1,154 | \$ 70 | \$ (3) | \$ 1,221 |
| OCI before reclassifications | (633) | 2 | — | (631) |
| Amounts reclassified from AOCI | 18 | (15) | — | 3 |
| OCI, net of tax | (615) | (13) | — | (628) |
| Ending balance | \$ 539 | \$ 57 | \$ (3) | \$ 593 |

For the year ended December 31, 2014

| | Changes in | | | |
|--------------------------------|--------------------------------------|---|--|---------------------|
| | Net Unrealized Gain on Securities | Net Gain on Cash Flow Hedging Instruments | Foreign Currency Translation Adjustments | AOCI, net of tax |
| Beginning balance | \$ 495 | \$ 79 | \$ — | \$ 574 |
| OCI before reclassifications | 660 | 14 | (3) | 671 |
| Amounts reclassified from AOCI | (1) | (23) | — | (24) |
| OCI, net of tax | 659 | (9) | (3) | 647 |
| Ending balance | \$ 1,154 | \$ 70 | \$ (3) | \$ 1,221 |

For the year ended December 31, 2013

| | Changes in | | | |
|--------------------------------|--------------------------------------|---|--|---------------------|
| | Net Unrealized Gain on Securities | Net Gain on Cash Flow Hedging Instruments | Foreign Currency Translation Adjustments | AOCI, net of tax |
| Beginning balance | \$ 1,752 | \$ 258 | \$ (23) | \$ 1,987 |
| OCI before reclassifications | (352) | (94) | 23 | (423) |
| Amounts reclassified from AOCI | (905) | (85) | — | (990) |
| OCI, net of tax | (1,257) | (179) | 23 | (1,413) |
| Ending balance | \$ 495 | \$ 79 | \$ — | \$ 574 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

14. Changes In and Reclassifications From Accumulated Other Comprehensive Income (continued)

Reclassifications from AOCI consist of the following:

| AOCI | Amount Reclassified from AOCI | | | Affected Line Item in the Consolidated Statement of Operations |
|---|--------------------------------------|--------------------------------------|--------------------------------------|--|
| | For the Year Ended December 31, 2015 | For the Year Ended December 31, 2014 | For the Year Ended December 31, 2013 | |
| Net Unrealized Gain on Securities | | | | |
| Available-for-sale securities [1] | \$ (27) | \$ 1 | \$ 1,392 | Net realized capital gains (losses) |
| | (27) | 1 | 1,392 | Total before tax |
| | (9) | — | 487 | Income tax expense |
| | \$ (18) | \$ 1 | \$ 905 | Net income |
| Net Gains on Cash-Flow Hedging Instruments | | | | |
| Interest rate swaps [2] | \$ (1) | \$ (1) | \$ 70 | Net realized capital gains (losses) |
| Interest rate swaps | 33 | 50 | 57 | Net investment income |
| Foreign currency swaps | (9) | (13) | 4 | Net realized capital gains (losses) |
| | 23 | 36 | 131 | Total before tax |
| | 8 | 13 | 46 | Income tax expense |
| | \$ 15 | \$ 23 | \$ 85 | Net income |
| Total amounts reclassified from AOCI | \$ (3) | \$ 24 | \$ 990 | Net income |

[1] The December 31, 2013 amounts includes \$1.5 billion of net unrealized gains on securities relating to the sales of the Retirement Plans and Individual Life businesses.

[2] The December 31, 2013 amounts includes \$71 of net gains on cash flow hedging instruments relating to the sales of the Retirement Plans and Individual Life businesses.

15. Quarterly Results (Unaudited)

| | Three months ended | | | | | | | |
|---|--------------------|--------|----------|----------|---------------|--------|--------------|--------|
| | March 31, | | June 30, | | September 30, | | December 31, | |
| | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 |
| Total revenues | \$ 668 | \$ 495 | \$ 702 | \$ 1,396 | \$ 630 | \$ 789 | \$ 499 | \$ 682 |
| Total benefits, losses and expenses | 483 | 451 | 461 | 826 | 500 | 699 | 525 | 525 |
| Net income | 145 | 57 | 230 | 399 | 118 | 91 | 7 | 130 |
| Less: Net income (loss) attributable to the noncontrolling interest | — | 1 | — | (1) | 1 | 3 | (1) | (2) |
| Net income attributable to Hartford Life Insurance Company | \$ 145 | \$ 56 | \$ 230 | \$ 400 | \$ 117 | \$ 88 | \$ 8 | \$ 132 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE I
SUMMARY OF INVESTMENTS—OTHER THAN INVESTMENTS IN AFFILIATES
(\$ in millions)

| Type of Investment | As of December 31, 2015 | | |
|--|-------------------------|---------------|--|
| | Cost | Fair Value | Amount at which shown on Balance Sheet |
| Fixed Maturities | | | |
| Bonds and notes | | | |
| U.S. government and government agencies and authorities (guaranteed and sponsored) | \$ 3,263 | \$ 3,476 | \$ 3,476 |
| States, municipalities and political subdivisions | 1,057 | 1,132 | 1,132 |
| Foreign governments | 328 | 331 | 331 |
| Public utilities | 2,419 | 2,603 | 2,603 |
| All other corporate bonds | 12,006 | 12,572 | 12,572 |
| All other mortgage-backed and asset-backed securities | 4,486 | 4,543 | 4,543 |
| Total fixed maturities, available-for-sale | 23,559 | 24,657 | 24,657 |
| Fixed maturities, at fair value using fair value option | 158 | 165 | 165 |
| Total fixed maturities | 23,717 | 24,822 | 24,822 |
| Equity Securities | | | |
| Common stocks | | | |
| Industrial, miscellaneous and all other | 431 | 419 | 419 |
| Non-redeemable preferred stocks | 40 | 40 | 40 |
| Total equity securities, available-for-sale | 471 | 459 | 459 |
| Equity securities, trading | 10 | 11 | 11 |
| Total equity securities | 481 | 470 | 470 |
| Mortgage loans | 2,918 | 2,995 | 2,918 |
| Policy loans | 1,446 | 1,446 | 1,446 |
| Futures, options and miscellaneous | 394 | 282 | 282 |
| Short-term investments | 572 | 572 | 572 |
| Investments in partnerships and trusts | 1,216 | | 1,216 |
| Total investments | \$ 30,744 | | \$ 31,726 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE IV
REINSURANCE
(In millions)

| | Gross Amount | Ceded to Other Companies | Assumed From Other Companies | Net Amount | Percentage of Amount Assumed to Net |
|---|-----------------|-----------------------------|------------------------------------|-----------------|--|
| For the year ended December 31, 2015 | | | | | |
| Life insurance in force | \$ 306,472 | \$ 234,306 | \$ 713 | \$ 72,879 | 1% |
| Insurance revenues | | | | | |
| Life insurance and annuities | \$ 2,687 | \$ 1,673 | \$ 113 | \$ 1,127 | 10% |
| Accident and health insurance | 190 | 128 | — | 62 | —% |
| Total insurance revenues | \$ 2,877 | \$ 1,801 | \$ 113 | \$ 1,189 | 10% |
| For the year ended December 31, 2014 | | | | | |
| Life insurance in force | \$ 327,772 | \$ 255,185 | \$ 797 | \$ 73,384 | 1% |
| Insurance revenues | | | | | |
| Life insurance and annuities | \$ 2,979 | \$ 1,691 | \$ 74 | \$ 1,362 | 5% |
| Accident and health insurance | 249 | 369 | — | (120) | —% |
| Total insurance revenues | \$ 3,228 | \$ 2,060 | \$ 74 | \$ 1,242 | 6% |
| For the year ended December 31, 2013 | | | | | |
| Life insurance in force | \$ 318,652 | \$ 241,684 | \$ 815 | \$ 77,783 | 1% |
| Insurance revenues | | | | | |
| Life insurance and annuities | \$ 3,238 | \$ 1,714 | \$ 13 | \$ 1,537 | 1% |
| Accident and health insurance | 264 | 155 | — | 109 | —% |
| Total insurance revenues | \$ 3,502 | \$ 1,869 | \$ 13 | \$ 1,646 | 1% |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE V
VALUATION AND QUALIFYING ACCOUNTS
(In millions)

| | Balance January 1, | | Charged to Costs and Expenses | | Translation Adjustment | | Write- offs/Payments/Other | | Balance December 31, |
|---|-----------------------|----|----------------------------------|----|---------------------------|----|-------------------------------|----|-------------------------|
| 2015 | | | | | | | | | |
| Valuation allowance on mortgage loans | \$ 15 | \$ | 4 | \$ | — | \$ | — | \$ | 19 |
| 2014 | | | | | | | | | |
| Valuation allowance on mortgage loans | \$ 12 | \$ | 4 | \$ | — | \$ | (1) | \$ | 15 |
| 2013 | | | | | | | | | |
| Valuation allowance on deferred tax asset | \$ 53 | \$ | — | \$ | — | \$ | (53) | \$ | — |
| Valuation allowance on mortgage loans | 14 | | 2 | | — | | (4) | | 12 |

SIGNATURES

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

HARTFORD LIFE INSURANCE COMPANY

/s/ Peter F. Sannizzaro

Peter F. Sannizzaro
Senior Vice President, Chief Financial Officer and Principal Accounting Officer

Date: February 26, 2016

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

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|--|-------------------|
| <u>/s/ Brion S. Johnson</u> Brion S. Johnson | President and Director | February 26, 2016 |
| <u>/s/ Peter F. Sannizzaro</u> Peter F. Sannizzaro | Senior Vice President, Chief Financial Officer and Principal Accounting Officer | February 26, 2016 |
| <u>/s/ Robert Paiano</u> Robert Paiano | Senior Vice President and Director | February 26, 2016 |

HARTFORD LIFE INSURANCE COMPANY AND SUBSIDIARIES
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2015
FORM 10-K
EXHIBITS INDEX

The exhibits attached to this Form 10-K are those that are required by Item 601 of Regulation S-K.

| <u>Exhibit No.</u> | <u>Description</u> |
|---------------------------|--|
| 3.01 | Restated Certificate of Incorporation of Hartford Life Insurance Company (the “Company”), effective April 2, 1982, as amended by Amendment No. 1, effective August 3, 1984, as amended by Amendment No. 2 effective December 31, 1996, as amended by Amendment No. 3, effective July 25, 2000 (incorporated herein by reference to Exhibit 3.01 to the Company’s Form 10-K for the fiscal year ended December 31, 2004). |
| 3.02 | Amended and Restated By-Laws of Hartford Life Insurance Company, effective March 15, 2013, (incorporated herein by reference to Exhibit 3.01 to the Company’s Form 10-Q for the quarterly period ended March 31, 2013). |
| 4.01 | Restated Certificate of Incorporation and Amended and Restated By-Laws of Hartford Life Insurance Company (incorporated by reference as indicated in Exhibits 3.01 and 3.02 hereto, respectively). |
| 10.01 | Intercompany Liquidity Agreement between The Hartford Financial Services Group, Inc., Hartford Life and Accident Insurance Company and certain affiliates, including Hartford Life Insurance Company, effective December 31, 2010 (incorporated by reference to Exhibit 10.1 of the Company’s Current Report on Form 8-K, filed on January 5, 2011). |
| 12.01 | Computation of Ratio of Earnings to Fixed Charges* |
| 23.01 | Consent of Deloitte & Touche LLP* |
| 31.01 | Certification of Brion S. Johnson, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 31.02 | Certification of Peter F. Sannizzaro, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 32.01 | Certification of Brion S. Johnson, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002* |
| 32.02 | Certification of Peter F. Sannizzaro, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002* |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extension Schema |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase |

* Filed with the Securities and Exchange Commission as an exhibit to this report.

HARTFORD LIFE INSURANCE COMPANY

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES AND EARNINGS
TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

(In millions)

| | For the years Ended December 31, | | | | |
|---|----------------------------------|-----------------|-----------------|-----------------|-----------------|
| | 2015 | 2014 | 2013 | 2012 | 2011 |
| EARNINGS: | | | | | |
| Income (loss) from continuing operations, before income taxes | \$ 530 | \$ 861 | \$ 561 | \$ 531 | \$ (137) |
| Add: Total fixed charges, before interest credited to contractholders | — | — | — | — | — |
| Total earnings (loss), before interest credited to contractholders | 530 | 861 | 561 | 531 | (137) |
| Interest credited to contractholders [1] | 682 | 725 | 952 | 1,526 | 1,554 |
| Total earnings | \$ 1,212 | \$ 1,586 | \$ 1,513 | \$ 2,057 | \$ 1,417 |
| FIXED CHARGES: | | | | | |
| Interest expense | \$ — | \$ — | \$ — | \$ — | \$ — |
| Interest factor attributable to rentals and other | — | — | — | — | — |
| Total fixed charges, before interest credited to contractholders | — | — | — | — | — |
| Interest credited to contractholders [1] | 682 | 725 | 952 | 1,526 | 1,554 |
| Total fixed charges | \$ 682 | \$ 725 | \$ 952 | \$ 1,526 | \$ 1,554 |
| RATIOS: | | | | | |
| Total earnings to total fixed charges [2] | 1.8 | 2.2 | 1.6 | 1.3 | NM |
| Deficiency of total earnings to total fixed charges [3] | \$ — | \$ — | \$ — | \$ — | \$ 137 |
| Ratio before interest credited to contractholders | | | | | |
| Total earnings to total fixed charges [2] [4] | NM | NM | NM | NM | NM |

[1] Interest credited to contractholders includes interest credited on general account assets and interest credited on consumer notes.

[2] Ratios of less than one-to-one are presented as "NM" or not meaningful.

[3] Represents additional earnings that would be necessary to result in a one-to-one ratio.

[4] This secondary ratio is disclosed for the convenience of policyholders invested in the Company's general account and Consumer Note holders.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following registration statements on Form S-3 of our report dated February 26, 2016 , relating to the consolidated financial statements and financial statement schedules of Hartford Life Insurance Company (the “Company”) appearing in this Annual Report on Form 10-K of Hartford Life Insurance Company for the year ended December 31, 2015.

Form S-3 Registration Nos.

333-192080

333-192081

333-192082

333-192083

333-202371

333-202372

DELOITTE & TOUCHE LLP
Hartford, Connecticut
February 26, 2016

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ENACTED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the period ended December 31, 2015 of Hartford Life Insurance Company (the "Company"), filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certifies, pursuant to 18 U.S.C. section 1350 as enacted by section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of section 13(a) or section 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Brion S. Johnson

Brion S. Johnson
President
February 26, 2016

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ENACTED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the period ended December 31, 2015 of Hartford Life Insurance Company (the "Company"), filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certifies, pursuant to 18 U.S.C. section 1350 as enacted by section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of section 13(a) or section 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Peter F. Sannizzaro

Peter F. Sannizzaro
Senior Vice President and Principal Accounting Officer
February 26, 2016