UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2018

OR

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

001-37963
(Commission file number)

ATHENE HOLDING LTD.

(Exact name of registrant as specified in its charter)

Bermuda	**98-0630022**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

96 Pitts Bay Road
Pembroke, HM08, Bermuda
(441) 279-8400
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes x No ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company ¨
Emerging growth company ¨	

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

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

The number of shares of each class of our common stock outstanding is set forth in the table below, as of September 30, 2018:

Class A common shares	164,849,200	Class M-2 common shares	841,011
Class B common shares	25,483,107	Class M-3 common shares	1,001,110
Class M-1 common shares	3,359,345	Class M-4 common shares	4,224,071

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PART I—FINANCIAL INFORMATION

PART II—OTHER INFORMATION

As used in this Form 10-Q, unless the context otherwise indicates, any reference to "Athene," "our Company," "the Company," "us," "we" and "our" refer to Athene Holding Ltd. together with its consolidated subsidiaries and any reference to "AHL" refers to Athene Holding Ltd. only.

Forward-Looking Statements

Certain statements in this Quarterly Report on Form 10-Q (report), other than purely historical information, including estimates, projections, statements relating to our business plans, anticipated future tax rates, objectives and expected operating results and the assumptions upon which those statements are based, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act).

You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "seek," "assume," "believe," "may," "will," "should," "could," "would," "likely" and other words and terms of similar meaning, including the negative of these or similar words and terms, in connection with any discussion of the timing or nature of future operating or financial performance or other events. However, not all forward-looking statements contain these identifying words. Forward-looking statements appear in a number of places throughout and give our current expectations and projections relating to our financial condition, results of operations, plans, strategies, objectives, future performance, business and other matters.

We caution you that forward-looking statements are not guarantees of future performance and that our actual financial condition, liquidity, results of operations and cash flows may differ materially from those made in or suggested by the forward-looking statements contained in this report. There can be no assurance that actual developments will be those anticipated by us. In addition, even if our financial condition, liquidity, results of operations and cash flows are consistent with the forward-looking statements contained in this report, those results or developments may not be indicative of results or developments in subsequent periods. A number of important factors could cause actual results or conditions to differ materially from those contained or implied by the forward-looking statements, including the risks discussed in *Part II–Item 1A. Risk Factors* included in this report and *Part I–Item 1A. Risk Factors* included in our Annual Report on Form 10-K for the year ended December 31, 2017 (2017 Annual Report). Factors that could cause actual results or conditions to differ from those reflected in the forward-looking statements contained in this report include:

- the accuracy of management's assumptions and estimates;
- variability in the amount of statutory capital that our insurance and reinsurance subsidiaries have or are required to hold;
- interest rate fluctuations;
- our potential need for additional capital in the future and the potential unavailability of such capital to us on favorable terms or at all;
- changes in relationships with important parties in our product distribution network;
- the activities of our competitors and our ability to grow our retail business in a highly competitive environment;
- the impact of general economic conditions on our ability to sell our products and the fair value of our investments;
- our ability to successfully acquire new companies or businesses and/or integrate such acquisitions into our existing framework;
- downgrades, potential downgrades or other negative actions by rating agencies;
- our dependence on key executives and inability to attract qualified personnel, or the potential loss of Bermudian personnel as a result of Bermuda employment restrictions;
- market and credit risks that could diminish the value of our investments;
- foreign currency fluctuations;
- the impact of changes to the creditworthiness of our reinsurance and derivative counterparties;
- changes in consumer perception regarding the desirability of annuities as retirement savings products;
- potential litigation (including class action litigation), enforcement investigations or regulatory scrutiny against us and our subsidiaries, which we may be required to defend against or respond to;
- the impact of new accounting rules or changes to existing accounting rules on our business;
- interruption or other operational failures in telecommunication and information technology and other operating systems, as well as our ability to maintain the security of those systems;
- the termination by Athene Asset Management LLC (AAM) of its investment management agreements with us and limitations on our ability to terminate such arrangements;
- AAM's dependence on key executives and inability to attract qualified personnel;
- increased regulation or scrutiny of alternative investment advisers and certain trading methods;
- potential changes to regulations affecting, among other things, transactions with our affiliates, the ability of our subsidiaries to make dividend payments or distributions to us, acquisitions by or of us, minimum capitalization and statutory reserve requirements for insurance companies and fiduciary obligations on parties who distribute our products;
- suspension or revocation of our subsidiaries' insurance and reinsurance licenses;
- increases in our tax liability resulting from the Base Erosion and Anti-Abuse Tax (BEAT) or unnecessary, inefficient, ineffective or counterproductive efforts undertaken to mitigate the cost of the BEAT;
- improper interpretation or application of Public Law no. 115-97, the Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018 (Tax Act) or subsequent changes to, clarifications of or guidance under the Tax Act that is counter to our interpretation and has retroactive effect;
- Athene Holding Ltd. (AHL) or its non-U.S. subsidiaries becoming subject to U.S. federal income taxation;
- adverse changes in U.S. tax law;

- our being subject to U.S. withholding tax under the Foreign Account Tax Compliance Act (FATCA);
- our potential inability to pay dividends or distributions; and
- other risks and factors listed under *Part II—Item 1A. Risk Factors* included in this report, *Part I—Item 1A. Risk Factors* included in our 2017 Annual Report and elsewhere in this report and in our 2017 Annual Report.

We caution you that the important factors referenced above may not be exhaustive. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect or anticipate. In light of these risks, you should not place undue reliance upon any forward-looking statements contained in this report. The forward-looking statements included in this report are made only as of the date hereof. We undertake no obligation, except as may be required by law, to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise. Comparisons of results for current and any prior periods are not intended to express any future trends, or indications of future performance, unless expressed as such, and should only be viewed as historical data.

GLOSSARY OF SELECTED TERMS

Unless otherwise indicated in this report, the following terms have the meanings set forth below:

Entities

Term or Acronym	Definition
A-A Mortgage	A-A Mortgage Opportunities, L.P.
AAA	AP Alternative Assets, L.P.
AAA Investor	AAA Guarantor – Athene, L.P.
AADE	Athene Annuity & Life Assurance Company
AAIA	Athene Annuity and Life Company
AAM	Athene Asset Management LLC
AGM	Apollo Global Management, LLC
AHL	Athene Holding Ltd.
ALIC	Athene Life Insurance Company
ALR	ALR Aircraft Investment Ireland Limited
ALRe	Athene Life Re Ltd.
AmeriHome	AmeriHome Mortgage Company, LLC
Apollo	Apollo Global Management, LLC, together with its subsidiaries
Apollo Group	(1) Apollo, (2) the AAA Investor, (3) any investment fund or other collective investment vehicle whose general partner or managing member is owned, directly or indirectly, by Apollo or one or more of Apollo's subsidiaries, (4) BRH Holdings GP, Ltd. and its shareholders and (5) any affiliate of any of the foregoing (except that AHL and its subsidiaries and employees of AHL, its subsidiaries or AAM are not members of the Apollo Group)
Athene USA	Athene USA Corporation
Athora	Athora Holding Ltd., formerly known as AGER Bermuda Holding Ltd. and formerly a consolidated subsidiary
CoInvest Other	AAA Investments (Other), L.P.
CoInvest VI	AAA Investments (Co-Invest VI), L.P.
CoInvest VII	AAA Investments (Co-Invest VII), L.P.
DOL	United States Department of Labor
MidCap	MidCap FinCo Limited
NAIC	National Association of Insurance Commissioners
NCL LLC	NCL Athene, LLC
NYSDFS	New York State Department of Financial Services
Voya	Voya Financial, Inc.
VIAC	Voya Insurance and Annuity Company
Venerable	Venerable Holdings, Inc.

Certain Terms & Acronyms

Term or Acronym	Definition
ABS	Asset-backed securities
ACL	Authorized control level risk-based capital as defined by the model created by the National Association of Insurance Commissioners
ALM	Asset liability management
ALRe RBC	The risk-based capital ratio of ALRe, when applying the National Association of Insurance Commissioners risk-based capital factors
Alternative investments	Alternative investments, including investment funds, collateralized loan obligation equity positions and certain other debt instruments considered to be equity-like
Base of earnings	Earnings generated from our results of operations and the underlying profitability drivers of our business
BEAT	Base Erosion and Anti-Abuse Tax
Bermuda capital	The capital of ALRe calculated under U.S. statutory accounting principles, including that for policyholder reserve liabilities which are subjected to U.S. cash flow testing requirements, but excluding certain items that do not exist under our applicable Bermuda requirements, such as interest maintenance reserves
Block reinsurance	A transaction in which the ceding company cedes all or a portion of a block of previously issued annuity contracts through a reinsurance agreement
BMA	Bermuda Monetary Authority
BSCR	Bermuda Solvency Capital Requirement
CAL	Company action level risk-based capital as defined by the model created by the National Association of Insurance Commissioners
Capital ratio	Ratios calculated (1) with respect to our U.S. insurance subsidiaries, by reference to risk-based capital, (2) with respect to ALRe, by reference to BSCR, and (3) with respect to our former German Group Companies, by reference to solvency capital requirements
CLO	Collateralized loan obligation
CMBS	Commercial mortgage-backed securities
Cost of crediting	The interest credited to the policyholders on our fixed annuities, including, with respect to our fixed indexed annuities, option costs, presented on an annualized basis for interim periods
DAC	Deferred acquisition costs
Deferred annuities	Fixed indexed annuities, annual reset annuities and multi-year guaranteed annuities
DSI	Deferred sales inducement
Excess capital	Capital in excess of the level management believes is needed to support our current operating strategy
FIA	Fixed indexed annuity, which is an insurance contract that earns interest at a crediting rate based on a specified index on a tax-deferred basis
Fixed annuities	FIAs together with fixed rate annuities
Fixed rate annuity	An insurance contract that offers tax-deferred growth and the opportunity to produce a guaranteed stream of retirement income for the lifetime of its policyholder
Flow reinsurance	A transaction in which the ceding company cedes a portion of newly issued policies to the reinsurer
GAAP	Accounting principles generally accepted in the United States of America
GLWB	Guaranteed lifetime withdrawal benefit
GMDB	Guaranteed minimum death benefit
IMA	Investment management agreement
IMO	Independent marketing organization
Invested assets	The sum of (a) total investments on the consolidated balance sheet with AFS securities at amortized cost, excluding derivatives, (b) cash and cash equivalents and restricted cash, (c) investments in related parties, (d) accrued investment income, (e) consolidated variable interest entities' assets, liabilities and noncontrolling interest and (f) policy loans ceded (which offset the direct policy loans in total investments). Invested assets includes investments supporting assumed funds withheld and modco agreements and excludes assets associated with funds withheld liabilities related to business exited through reinsurance agreements and derivative collateral (offsetting the related cash positions)
Investment margin	Investment margin applies to deferred annuities and is the excess of our net investment earned rate over the cost of crediting to our policyholders, presented on an annualized basis for interim periods
Liability outflows	The aggregate of withdrawals on our deferred annuities, maturities of our funding agreements, payments on payout annuities and pension risk benefit payments
LIMRA	Life Insurance and Market Research Association

Term or Acronym	Definition
Modco	Modified coinsurance
MVA	Market value adjustment
MYGA	Multi-year guaranteed annuity
Net investment earned rate	Income from our invested assets divided by the average invested assets for the relevant period, presented on an annualized basis for interim periods
Other liability costs	Other liability costs include DAC, DSI and VOBA amortization, rider reserves, institutional costs, the cost of liabilities on products other than deferred annuities including offsets for premiums, product charges and other revenues
OTTI	Other-than-temporary impairment
Overall tax rate	Tax rate including corporate income taxes, the BEAT and excise taxes, in each case, to the extent applicable, as a percentage of adjusted operating income before tax
Payout annuities	Annuities with a current cash payment component, which consist primarily of SPIAs, supplemental contracts and structured settlements
Policy loan	A loan to a policyholder under the terms of, and which is secured by, a policyholder's policy
PRT	Pension risk transfer
RBC	Risk-based capital
Reserve liabilities	The sum of (a) interest sensitive contract liabilities, (b) future policy benefits, (c) dividends payable to policyholders, and (d) other policy claims and benefits, offset by reinsurance recoverable, excluding policy loans ceded. Reserve liabilities also includes the reserves related to assumed modco agreements in order to appropriately match the costs incurred in the consolidated statements of income with the liabilities. Reserve liabilities is net of the ceded liabilities to third-party reinsurers as the costs of the liabilities are passed to such reinsurers and therefore we have no net economic exposure to such liabilities, assuming our reinsurance counterparties perform under our agreements
Rider reserves	Guaranteed lifetime withdrawal benefits and guaranteed minimum death benefits reserves
RMBS	Residential mortgage-backed securities
RML	Residential mortgage loan
Sales	All money paid into an individual annuity, including money paid into new contracts with initial purchase occurring in the specified period and existing contracts with initial purchase occurring prior to the specified period (excluding internal transfers)
SPIA	Single premium immediate annuity
Surplus assets	Assets in excess of policyholder obligations, determined in accordance with the applicable domiciliary jurisdiction's statutory accounting principles
TAC	Total adjusted capital as defined by the model created by the NAIC
U.S. RBC Ratio	The CAL RBC ratio for AADE, our parent U.S. insurance company
VIE	Variable interest entity
VOBA	Value of business acquired
Voya reinsurance transactions	Collectively, the coinsurance and modified coinsurance agreements we entered into on June 1, 2018 with Voya Insurance and Annuity Company and ReliaStar Life Insurance Company

Item 1. Financial Statements

Index to Condensed Consolidated Financial Statements (unaudited)

ATHENE HOLDING LTD.
Condensed Consolidated Balance Sheets *(Unaudited)*

(In millions)	September 30, 2018	December 31, 2017
Assets		
Investments		
Fixed maturity securities, at fair value		
Available-for-sale securities (amortized cost: 2018 – $59,744 and 2017 – $58,506)	$ 59,882	$ 61,012
Trading securities	1,977	2,196
Equity securities, at fair value	292	790
Mortgage loans, net of allowances (portion at fair value: 2018 – $37 and 2017 – $41)	8,982	6,233
Investment funds (portion at fair value: 2018 – $127 and 2017 – $145)	692	699
Policy loans	512	530
Funds withheld at interest (portion at fair value: 2018 – $151 and 2017 – $312)	7,841	7,085
Derivative assets	2,515	2,551
Real estate (portion held for sale: 2017 – $32)	—	624
Short-term investments, at fair value (cost: 2018 – $234 and 2017 – $201)	234	201
Other investments (portion at fair value: 2018 – $43 and 2017 – $0)	114	133
Total investments	83,041	82,054
Cash and cash equivalents	3,723	4,888
Restricted cash	218	105
Investments in related parties		
Fixed maturity securities, at fair value		
Available-for-sale securities (amortized cost: 2018 – $1,250 and 2017 – $399)	1,243	406
Trading securities	259	307
Mortgage loans	389	—
Investment funds (portion at fair value: 2018 – $197 and 2017 – $30)	2,093	1,310
Funds withheld at interest (portion at fair value: 2018 – $91)	13,963	—
Short-term investments, at fair value (cost: 2018 – $10 and 2017 – $52)	10	52
Other investments	386	238
Accrued investment income (related party: 2018 – $23 and 2017 – $10)	686	652
Reinsurance recoverable (related party: 2018 – $8; portion at fair value: 2018 – $1,679 and 2017 – $1,824)	5,201	4,972
Deferred acquisition costs, deferred sales inducements and value of business acquired	4,972	2,930
Other assets	1,187	969
Assets of consolidated variable interest entities		
Investments		
Fixed maturity securities, trading, at fair value – related party	48	48
Equity securities, at fair value – related party	176	240
Investment funds (related party: 2018 – $564 and 2017 – $571; portion at fair value: 2018 – $564 and 2017 – $549)	605	571
Cash and cash equivalents	2	4
Other assets	2	1
Total assets	$ 118,204	$ 99,747

(Continued)

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Balance Sheets *(Unaudited)*

(In millions, except share and per share data)	September 30, 2018	December 31, 2017
Liabilities and Equity		
Liabilities		
Interest sensitive contract liabilities (related party: 2018 – $17,367; portion at fair value: 2018 – $9,557 and 2017 – $8,929)	$ 88,903	$ 67,708
Future policy benefits (related party: 2018 – $965; portion at fair value: 2018 – $2,233 and 2017 – $2,428)	14,771	17,507
Other policy claims and benefits (related party: 2018 – $3)	140	211
Dividends payable to policyholders	120	1,025
Long-term debt	991	—
Derivative liabilities	124	134
Payables for collateral on derivatives	2,315	2,323
Funds withheld liability (portion at fair value: 2018 – $3 and 2017 – $22)	389	407
Other liabilities (related party: 2018 – $99 and 2017 – $64)	1,380	1,222
Liabilities of consolidated variable interest entities	2	2
Total liabilities	109,135	90,539
Commitments and Contingencies (Note 13)		
Equity		
Common stock		
Class A – par value $0.001 per share; authorized: 2018 and 2017 – 425,000,000 shares; issued and outstanding: 2018 – 164,849,200 and 2017 – 142,386,704 shares	—	—
Class B – par value $0.001 per share; convertible to Class A; authorized: 2018 and 2017 – 325,000,000 shares; issued and outstanding: 2018 – 25,483,107 and 2017 – 47,422,399 shares	—	—
Class M-1 – par value $0.001 per share; contingently convertible to Class A; authorized: 2018 and 2017 – 7,109,560 shares; issued and outstanding: 2018 – 3,359,345 and 2017 – 3,388,890 shares	—	—
Class M-2 – par value $0.001 per share; contingently convertible to Class A; authorized: 2018 and 2017 – 5,000,000 shares; issued and outstanding: 2018 – 841,011 and 2017 – 851,103 shares	—	—
Class M-3 – par value $0.001 per share; contingently convertible to Class A; authorized: 2018 and 2017 – 7,500,000 shares; issued and outstanding: 2018 – 1,001,110 and 2017 – 1,092,000 shares	—	—
Class M-4 – par value $0.001 per share; contingently convertible to Class A; authorized: 2018 and 2017 – 7,500,000 shares; issued and outstanding: 2018 – 4,224,071 and 2017 – 4,711,743 shares	—	—
Additional paid-in capital	3,499	3,472
Retained earnings	5,527	4,321
Accumulated other comprehensive income (related party: 2018 – $(7) and 2017 – $48)	43	1,415
Total shareholders' equity	9,069	9,208
Total liabilities and equity	$ 118,204	$ 99,747

(Concluded)

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Statements of Income *(Unaudited)*

(In millions, except per share data)	Three months ended September 30, 2018	Three months ended September 30, 2017	Nine months ended September 30, 2018	Nine months ended September 30, 2017
Revenues				
Premiums (related party of $41 and $0 for the three months ended and $623 and $0 for the nine months ended September 30, 2018 and 2017, respectively)	$ 531	$ 72	$ 1,535	$ 503
Products charges (related party of $14 and $0 for the three months ended and $19 and $0 for the nine months ended September 30, 2018 and 2017, respectively)	119	86	321	252
Net investment income (related party investment income of $226 and $50 for the three months ended and $369 and $179 for the nine months ended September 30, 2018 and 2017, respectively, and related party investment expense of $88 and $81 for the three months ended and $257 and $235 for the nine months ended September 30, 2018 and 2017, respectively)	1,070	820	2,883	2,427
Investment related gains (losses) (related party of $(27) and $(2) for the three months ended and $(8) and $(10) for the nine months ended September 30, 2018 and 2017, respectively)	823	473	585	1,615
Other-than-temporary impairment investment losses				
Other-than-temporary impairment losses	(7)	(11)	(10)	(23)
Other-than-temporary impairment losses reclassified to (from) other comprehensive income	4	(2)	4	(2)
Net other-than-temporary impairment losses	(3)	(13)	(6)	(25)
Other revenues	10	8	22	24
Revenues of consolidated variable interest entities				
Net investment income (related party of $15 and $10 for the three months ended and $39 and $30 for the nine months ended September 30, 2018 and 2017, respectively)	15	10	39	30
Investment related gains (losses) (related party of $23 and $17 for the three months ended and $17 and $29 for the nine months ended September 30, 2018 and 2017, respectively)	23	17	17	29
Total revenues	2,588	1,473	5,396	4,855
Benefits and expenses				
Interest sensitive contract benefits (related party of $135 and $0 for the three months ended and $155 and $0 for the nine months ended September 30, 2018 and 2017, respectively)	741	621	1,092	1,866
Amortization of deferred sales inducements	23	13	66	42
Future policy and other policy benefits (related party of $58 and $0 for the three months ended and $638 and $0 for the nine months ended September 30, 2018 and 2017, respectively)	920	259	2,178	1,051
Amortization of deferred acquisition costs and value of business acquired	30	80	211	251
Dividends to policyholders	10	48	32	129
Policy and other operating expenses (related party of $22 and $4 for the three months ended and $27 and $10 for the nine months ended September 30, 2018 and 2017, respectively)	158	158	453	479
Operating expenses of consolidated variable interest entities	—	—	1	—
Total benefits and expenses	1,882	1,179	4,033	3,818
Income before income taxes	706	294	1,363	1,037
Income tax expense	66	20	191	53
Net income	$ 640	$ 274	$ 1,172	$ 984
Earnings per share				
Basic – Classes A, B, M-1, M-2, M-3 and M-4	$ 3.24	$ 1.40	$ 5.94	$ 5.05
Diluted – Class A	3.23	1.39	5.92	5.00
Diluted – Class B	3.24	1.40	5.94	5.05
Diluted – Class M-1	3.24	1.40	5.94	5.05
Diluted – Class M-2	3.24	1.39	5.90	3.26
Diluted – Class M-3	3.24	1.07	5.90	2.27
Diluted – Class M-4	2.49	0.79	4.42	1.91

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Statements of Comprehensive Income (Loss) *(Unaudited)*

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Net income	$ 640	$ 274	$ 1,172	$ 984
Other comprehensive income (loss), before tax				
Unrealized investment gains (losses) on available-for-sale securities	(103)	171	(1,680)	1,172
Noncredit component of other-than-temporary impairment losses on available-for-sale securities	(4)	2	(4)	2
Unrealized gains (losses) on hedging instruments	7	(31)	52	(69)
Pension adjustments	—	1	3	—
Foreign currency translation adjustments	—	4	(10)	14
Other comprehensive income (loss), before tax	(100)	147	(1,639)	1,119
Income tax expense (benefit) related to other comprehensive income	(17)	45	(309)	324
Other comprehensive income (loss)	(83)	102	(1,330)	795
Comprehensive income (loss)	$ 557	$ 376	$ (158)	$ 1,779

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Statements of Equity *(Unaudited)*

(In millions)	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income	Total Athene Holding Ltd. shareholders' equity	Noncontrolling interest	Total equity
Balance at December 31, 2016	$ —	$ 3,421	$ 3,070	$ 367	$ 6,858	$ 1	$ 6,859
Net income	—	—	984	—	984	—	984
Other comprehensive income	—	—	—	795	795	—	795
Stock-based compensation	—	40	—	—	40	—	40
Retirement or repurchase of shares	—	—	(8)	—	(8)	—	(8)
Other changes in equity of noncontrolling interests	—	—	—	—	—	(1)	(1)
Balance at September 30, 2017	$ —	$ 3,461	$ 4,046	$ 1,162	$ 8,669	$ —	$ 8,669
Balance at December 31, 2017	$ —	$ 3,472	$ 4,321	$ 1,415	$ 9,208	$ —	$ 9,208
Adoption of accounting standards[1]	—	—	39	(42)	(3)	—	(3)
Net income	—	—	1,172	—	1,172	—	1,172
Other comprehensive loss	—	—	—	(1,330)	(1,330)	—	(1,330)
Issuance of shares, net of expenses	—	2	—	—	2	—	2
Stock-based compensation	—	25	—	—	25	—	25
Retirement or repurchase of shares	—	—	(5)	—	(5)	—	(5)
Balance at September 30, 2018	$ —	$ 3,499	$ 5,527	$ 43	$ 9,069	$ —	$ 9,069

[1] *See discussion of adoptions in Note 1 – Business, Basis of Presentation and Significant Accounting Policies.*

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Statements of Cash Flows *(Unaudited)*

	Nine months ended September 30,	
(In millions)	2018	2017
Cash flows from operating activities		
Net income	$ 1,172	$ 984
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of deferred acquisition costs and value of business acquired	211	251
Amortization of deferred sales inducements	66	42
Accretion of net investment premiums, discounts, and other	(143)	(141)
Payment at inception of reinsurance agreements, net (related party: 2018 – $(407))	(394)	—
Stock-based compensation	20	40
Net investment income (related party: 2018 – $(77) and 2017 – $(66))	(61)	(65)
Net recognized (gains) losses on investments and derivatives (related party: 2018 – $(5) and 2017 – $2)	(559)	(1,271)
Policy acquisition costs deferred	(495)	(371)
Changes in operating assets and liabilities:		
Accrued investment income (related party: 2018 – $(13) and 2017 – $0)	(70)	(67)
Interest sensitive contract liabilities (related party: 2018 – $136)	562	1,655
Future policy benefits, other policy claims and benefits, dividends payable to policyholders and reinsurance recoverable (related party: 2018 – $54)	1,080	460
Funds withheld assets and liabilities (related party: 2018 – $(119))	(239)	(327)
Other assets and liabilities	103	179
Consolidated variable interest entities related:		
Net recognized (gains) losses on investments and derivatives (related party: 2018 – $(18) and 2017 – $(29))	(18)	(28)
Other operating activities, net	—	1
Net cash provided by operating activities	1,235	1,342
Cash flows from investing activities		
Sales, maturities and repayments of:		
Fixed maturity securities		
Available-for-sale securities (related party: 2018 – $111 and 2017 – $126)	9,003	9,199
Trading securities (related party: 2018 – $30 and 2017 – $52)	327	120
Equity securities (related party: 2018 – $0 and 2017 – $22)	25	743
Mortgage loans	1,048	950
Investment funds (related party: 2018 – $197 and 2017 – $219)	330	300
Derivative instruments and other invested assets	1,548	1,083
Short-term investments (related party: 2018 – $162 and 2017 – $28)	430	289
Purchases of:		
Fixed maturity securities		
Available-for-sale securities (related party: 2018 – $(598) and 2017 – $(186))	(12,128)	(13,668)
Trading securities	(17)	(79)
Equity securities	(163)	(655)
Mortgage loans (related party: 2018 – $(389) and 2017 – $0)	(4,079)	(1,925)
Investment funds (related party: 2018 – $(894) and 2017 – $(244))	(1,073)	(366)
Derivative instruments and other invested assets (related party: 2018 – $(150) and 2017 – $0)	(973)	(562)
Real estate	—	(19)
Short-term investments (related party: 2018 – $(121) and 2017 – $(37))	(421)	(222)
Consolidated variable interest entities related:		
Sales, maturities and repayments of investments (related party: 2018 – $103 and 2017 – $40)	114	40
Purchases of investments (related party: 2018 – $(14) and 2017 – $(22))	(66)	(22)
Deconsolidation of AGER Bermuda Holding Ltd. and its subsidiaries	(296)	—
Cash settlement of derivatives	5	(4)
Other investing activities, net	240	339
Net cash used in investing activities	(6,146)	(4,459)

(Continued)

See accompanying notes to the unaudited condensed consolidated financial statements

ATHENE HOLDING LTD.
Condensed Consolidated Statements of Cash Flows *(Unaudited)*

	Nine months ended September 30,	
(In millions)	2018	2017
Cash flows from financing activities		
Capital contributions	2	—
Proceeds from short-term debt	183	—
Repayment of short-term debt	(183)	—
Proceeds from long-term debt	998	—
Deposits on investment-type policies and contracts (related party: 2018 – $140)	7,011	7,521
Withdrawals on investment-type policies and contracts (related party: 2018 – $(143))	(4,254)	(3,701)
Payments from (for) coinsurance agreements on investment-type contracts, net	9	(17)
Net change in cash collateral posted for derivative transactions	(8)	513
Repurchase of common stock	(5)	(8)
Other financing activities, net	104	(29)
Net cash provided by financing activities	3,857	4,279
Effect of exchange rate changes on cash and cash equivalents	—	30
Net (decrease) increase in cash and cash equivalents	(1,054)	1,192
Cash and cash equivalents at beginning of year[1]	4,997	2,516
Cash and cash equivalents at end of period[1]	$ 3,943	$ 3,708
Supplementary information		
Non-cash transactions		
Deposits on investment-type policies and contracts through reinsurance agreements (related party: 2018 – $17,574)	$ 18,508	$ 511
Withdrawals on investment-type policies and contracts through reinsurance agreements (related party: 2018 – $604)	899	390
Investments received from settlements on reinsurance agreements	36	36
Investments exchanged for related party investments	95	26
Investment in Athora Holding Ltd. received upon deconsolidation	108	—

[1] *Includes cash and cash equivalents, restricted cash, and cash and cash equivalents of consolidated variable interest entities.*

(Concluded)

See accompanying notes to the unaudited condensed consolidated financial statements

1. Business, Basis of Presentation and Significant Accounting Policies

Athene Holding Ltd. (AHL), a Bermuda exempted company, together with its subsidiaries (collectively, Athene, we, our, us, or the Company), is a leading retirement services company that issues, reinsures and acquires retirement savings products in all U.S. states and the District of Columbia.

We conduct business primarily through the following consolidated subsidiaries:

- Our non-U.S. reinsurance subsidiaries, to which AHL's other insurance subsidiaries and third party ceding companies directly and indirectly reinsure a portion of their liabilities, including Athene Life Re Ltd. (ALRe), a Bermuda exempted company; and
- Athene USA Corporation, an Iowa corporation (together with its subsidiaries, Athene USA).

In addition, we consolidate certain variable interest entities (VIEs), for which we determined we are the primary beneficiary, as discussed in *Note 4 – Variable Interest Entities*.

Basis of Presentation—We have prepared the accompanying condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial information and the United States Securities and Exchange Commission's rules and regulations for Form 10-Q and Article 10 of Regulation S-X. The accompanying condensed consolidated financial statements are unaudited and reflect all adjustments, consisting only of normal recurring items, considered necessary for fair statement of the results for the interim periods presented. All significant intercompany accounts and transactions have been eliminated. Interim operating results are not necessarily indicative of the results expected for the entire year.

The condensed consolidated balance sheet as of December 31, 2017 has been derived from the audited financial statements, but does not include all of the information and footnotes required by GAAP for complete financial statements. Therefore, these condensed consolidated financial statements should be read in conjunction with our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017. The preparation of financial statements requires the use of management estimates. Actual results may differ from estimates used in preparing the condensed consolidated financial statements.

Deconsolidation – AGER Bermuda Holding Ltd. and its subsidiaries, now known as Athora Holding Ltd. (Athora), was our consolidated subsidiary for the year ended December 31, 2017. In April 2017, in connection with a private offering, Athora entered into subscription agreements with AHL, certain affiliates of Apollo Global Management, LLC (AGM and, together with its subsidiaries, Apollo) and a number of other third-party investors pursuant to which Athora secured commitments from such parties to purchase new common shares in Athora (Athora Offering). In November 2017, the Athora board of directors approved resolutions authorizing the closing of the Athora Offering (Closing) to occur on January 1, 2018 and approving a capital call from all of the Athora investors, excluding us. In connection with the Closing and the issuance of shares in respect of the capital call, each of which occurred on January 1, 2018, our equity interest in Athora was exchanged for common shares of Athora. As a result, on January 1, 2018, we held 10% of the aggregate voting power of and less than 50% of the economic interest in Athora and, as such, it is thereafter held as a related party investment rather than a consolidated subsidiary. We did not recognize a material amount in the condensed consolidated statements of income upon deconsolidation in 2018.

Adopted Accounting Pronouncements

Revenue Recognition (ASU 2017-13, ASU 2016-20, ASU 2016-12, ASU 2016-11, ASU 2016-10, ASU 2016-08, ASU 2015-14 and ASU 2014-09)
These updates are based on the core principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. These updates replace all general and most industry-specific revenue recognition guidance, excluding insurance contracts, leases, financial instruments and guarantees, which have been scoped out of these updates. Since the guidance does not apply to revenue on contracts accounted for under the financial instruments or insurance contracts standards, only a portion of our revenues are impacted by this guidance. We adopted these updates on a modified retrospective basis effective January 1, 2018. The adoptions did not have a material effect on our consolidated financial statements.

Derivatives and Hedging – Targeted Improvements (ASU 2017-12)
The amendments in this update contain improvements to the financial reporting of hedging relationships that more closely reflect the economic results of an entity's risk management activities in its financial statements. Additionally, the amendments in this update make certain targeted improvements to simplify the application of hedge accounting. We early adopted this update effective January 1, 2018, and the adoption did not have a material effect on our consolidated financial statements.

Gains and Losses from the Derecognition of Nonfinancial Assets (ASU 2017-05)
The amendments in this update clarify the scope of asset derecognition guidance and accounting for partial sales of nonfinancial assets. We adopted this update on a modified retrospective basis effective January 1, 2018. The adoption did not have a material effect on our consolidated financial statements.

Statement of Cash Flows – Restricted Cash (ASU 2016-18)
This update requires amounts generally described as restricted cash or restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the consolidated statements of cash flows. We adopted this update effective January 1, 2018, and have changed the presentation on the consolidated statements of cash flows as required by this update.

Income Taxes – Intra-Entity Transfers (ASU 2016-16)
This update requires the immediate recognition of current and deferred income tax effects of intra-entity transfers of assets, other than inventory. Prior to adoption, recognition of the income tax consequence was not recognized until the asset was sold to an outside party. We adopted this update effective January 1, 2018. Upon adoption, we recognized a cumulative-effect decrease to beginning retained earnings of $3 million.

Statement of Cash Flows (ASU 2016-15)
This update provides specific guidance to clarify how entities should classify certain cash receipts and cash payments on the statement of cash flows. The update also clarifies the application of the predominance principle when cash receipts and cash payments have aspects of more than one class of cash flows. We adopted this update effective January 1, 2018, and the adoption did not have a material effect on our consolidated financial statements.

Financial Instruments – Recognition and Measurement (ASU 2016-01)
This update changes the accounting for certain equity investments, the presentation of changes in the fair value of liabilities measured under the fair value option due to instrument-specific credit risk, and certain disclosures. For liabilities measured under the fair value option, changes in fair value attributable to instrument-specific credit risk will no longer affect net income, but will be recognized separately in other comprehensive income (OCI). Additionally, this update requires equity investments to be measured at fair value with subsequent changes recognized in net income, except for those accounted for under the equity method or requiring consolidation. Prior to the effective date of this update, changes in fair value related to available-for-sale (AFS) equity securities were recognized in OCI. We adopted this update effective January 1, 2018. Upon adoption, we recognized a cumulative-effect increase to beginning retained earnings of $42 million and a corresponding decrease to accumulated other comprehensive income (AOCI). Additionally, we combined the presentation of AFS and trading equity securities on the consolidated balance sheets for all periods presented.

Recently Issued Accounting Pronouncements

Consolidation (ASU 2018-17)
The amendments in this update expand certain discussions in the VIE guidance, including considerations necessary for determining when a decision-making fee is a variable interest. We will be required to adopt this update retrospectively with a cumulative-effect adjustment to retained earnings at the beginning of the earliest period presented. The update is effective January 1, 2020. Early adoption is permitted. We are currently evaluating the impact of this guidance on our consolidated financial statements.

Derivatives and Hedging (ASU 2018-16)
The amendments in this update allow entities to use the Overnight Index Swap rate based on the Secured Overnight Financing Rate as a U.S. benchmark interest rate for hedge accounting purposes, in addition to the previously acceptable rates. We will be required to adopt this update prospectively for qualifying new or redesignated hedging relationships entered into on or after the date of adoption. This update is effective January 1, 2019. We are currently evaluating the impact of this guidance on our consolidated financial statements.

Cloud Computing Arrangements (ASU 2018-15)
The amendments in this update align the requirements for capitalizing implementation costs incurred in a cloud computing service arrangement with the requirements for capitalizing implementation costs incurred for internal-use software. We will be required to adopt this update on January 1, 2020, and we can elect to adopt this update either prospectively or retrospectively. Early adoption is permitted. We are currently evaluating the impact of this guidance on our consolidated financial statements.

Fair Value Measurement – Disclosure Requirements (ASU 2018-13)
The amendments in this update modify the disclosure requirements for fair value measurements by removing, modifying or adding certain disclosures. We will be required to adopt this update on January 1, 2020, and depending on the amendment will be required to adopt prospectively or retrospectively. Early adoption is permitted for any removed or modified disclosure or for the entire update. We are currently evaluating the impact of this guidance on our consolidated financial statements.

Insurance – Targeted Improvements to the Accounting for Long-Duration Contracts (ASU 2018-12)
This update amends four key areas pertaining to the accounting and disclosures for long-duration insurance and investment contracts.

- The update requires cash flow assumptions used to measure the liability for future policy benefits to be updated at least annually and no longer allows a provision for adverse deviation. The remeasurement of the liability associated with the update of assumptions is required to be recognized in net income. Loss recognition testing is eliminated for traditional and limited-payment contracts. The update also requires the discount rate utilized in measuring the liability to be an upper-medium grade fixed-income instrument yield, which is to be updated at each reporting date. The change in liability due to changes in the discount rate is to be recognized in other comprehensive income.
- The update simplifies the amortization of deferred acquisition costs and other balances amortized in proportion to premiums, gross profits, or gross margins, requiring such balances to be amortized on a constant level basis over the expected term of the contracts. Deferred costs are required to be written off for unexpected contract terminations but are not subject to impairment testing.

- The update requires certain contract features meeting the definition of market risk benefits to be measured at fair value. Among the features included in this definition are the guaranteed lifetime withdrawal benefits (GLWB) and guaranteed minimum death benefit (GMDB) riders attached to the Company's annuity products. The change in fair value of the market risk benefits is to be recognized in net income, excluding the portion attributable to changes in instrument-specific credit risk which is recognized in other comprehensive income.
- The update also introduces disclosure requirements around the liability for future policy benefits, policyholder account balances, market risk benefits, separate account liabilities, and deferred acquisition costs. This includes disaggregated rollforwards of these balances and information about significant inputs, judgments, assumptions and methods used in their measurement.

We will be required to adopt this update effective January 1, 2021. Certain provisions of the update are required to be adopted on a fully retrospective basis, while others may be adopted on a modified retrospective basis. Early adoption is permitted effective January 1, 2019. We are currently evaluating the impact of this guidance on our consolidated financial statements.

Stock Compensation – Nonemployee Share-Based Payments (ASU 2018-07)
The amendments in this update simplify the accounting for share-based payments to nonemployees by aligning with the accounting for share-based payments to employees, with certain exceptions. We will be required to adopt this update on a modified retrospective basis effective January 1, 2019. We do not expect the adoption of this update will have a material effect on our consolidated financial statements.

Leases (ASU 2018-11, ASU 2018-10, ASU 2018-01, ASU 2017-13 and ASU 2016-02)
These updates are intended to increase transparency and comparability for lease transactions. ASU 2016-02 requires a lessee to recognize a right-of-use asset and lease liability on the balance sheet for all leases with an original term longer than twelve months and disclose key information about leasing arrangements. Lessor accounting is largely unchanged.

The updates are effective January 1, 2019. ASU 2016-02 required the adoption on a modified retrospective basis. However, with the issuance of ASU 2018-11, we have the option to recognize the cumulative effect as an adjustment to the opening balance of retained earnings in the year of adoption, while continuing to present all prior periods under the previous lease guidance. These updates provide optional practical expedients in transition. We expect to elect the 'package of practical expedients', which permits us to maintain our prior conclusions about lease identification, classification and initial direct costs.

We have reviewed our existing lease contracts and are now assessing the financial impact on our consolidated financial statements. Our efforts are primarily focused on quantifying the lease liability and right-of-use asset that will be recorded upon adoption related to office space, copiers, and reserved areas and equipment at data centers.

Intangibles – Simplifying the Test for Goodwill Impairment (ASU 2017-04)
The amendments in this update simplify the subsequent measurement of goodwill by eliminating the comparison of the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill to determine the goodwill impairment loss. With the adoption of this guidance, a goodwill impairment will be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of the goodwill allocated to that reporting unit. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. We will be required to adopt this update prospectively effective January 1, 2020. Early adoption is permitted. We do not expect the adoption of this update will have a material effect on our consolidated financial statements.

Financial Instruments – Credit Losses (ASU 2016-13)
This update is designed to reduce complexity by limiting the number of credit impairment models used for different assets. The model will result in accelerated credit loss recognition on assets held at amortized cost, which includes our commercial and residential mortgage investments. The identification of credit-deteriorated securities will include all assets that have experienced a more-than-insignificant deterioration in credit since origination. Additionally, any changes in the expected cash flows of credit-deteriorated securities will be recognized immediately in the income statement. AFS fixed maturity securities are not in scope of the new credit loss model, but will undergo targeted improvements to the current reporting model including the establishment of a valuation allowance for credit losses versus the current direct write down approach. We will be required to adopt this update effective January 1, 2020. Early adoption is permitted effective January 1, 2019. We are currently evaluating the impact of this guidance on our consolidated financial statements.

2. Investments

AFS Securities—Our AFS investment portfolio includes bonds, collateralized loan obligations (CLO), asset-backed securities (ABS), commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS) and redeemable preferred stock. Our AFS investment portfolio includes direct investments in affiliates of AGM where Apollo can exercise significant influence over the affiliates. These investments are presented as investments in related parties on the condensed consolidated balance sheets, and are separately disclosed below.

The following table represents the amortized cost, gross unrealized gains and losses, fair value and other-than-temporary impairments (OTTI) in AOCI of our AFS investments by asset type:

	September 30, 2018				
(In millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	OTTI in AOCI
AFS securities					
U.S. government and agencies	$ 143	$ —	$ (1)	$ 142	$ —
U.S. state, municipal and political subdivisions	1,142	103	(8)	1,237	—
Foreign governments	180	3	(3)	180	—
Corporate	37,819	447	(947)	37,319	1
CLO	5,325	15	(38)	5,302	—
ABS	4,869	29	(43)	4,855	—
CMBS	2,343	29	(48)	2,324	7
RMBS	7,923	610	(10)	8,523	9
Total AFS securities	59,744	1,236	(1,098)	59,882	17
AFS securities – related party					
CLO	612	1	(4)	609	—
ABS	638	1	(5)	634	—
Total AFS securities – related party	1,250	2	(9)	1,243	—
Total AFS securities, including related party	$ 60,994	$ 1,238	$ (1,107)	$ 61,125	$ 17

	December 31, 2017				
(In millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	OTTI in AOCI
Fixed maturity securities					
U.S. government and agencies	$ 63	$ 1	$ (2)	$ 62	$ —
U.S. state, municipal and political subdivisions	996	171	(2)	1,165	—
Foreign governments	2,575	116	(8)	2,683	—
Corporate	35,173	1,658	(171)	36,660	—
CLO	5,039	53	(8)	5,084	—
ABS	3,945	53	(27)	3,971	1
CMBS	1,994	48	(21)	2,021	1
RMBS	8,721	652	(7)	9,366	11
Total fixed maturity securities	58,506	2,752	(246)	61,012	13
Equity securities[1]	271	7	(1)	277	—
Total AFS securities	58,777	2,759	(247)	61,289	13
AFS securities – related party					
CLO	353	7	—	360	—
ABS	46	—	—	46	—
Total AFS securities – related party	399	7	—	406	—
Total AFS securities, including related party	$ 59,176	$ 2,766	$ (247)	$ 61,695	$ 13

[1] *Included in equity securities on the condensed consolidated balance sheets.*

The amortized cost and fair value of fixed maturity AFS securities, including related party, are shown by contractual maturity below:

	September 30, 2018	
(In millions)	Amortized Cost	Fair Value
Due in one year or less	$ 1,164	$ 1,164
Due after one year through five years	8,647	8,636
Due after five years through ten years	11,125	10,909
Due after ten years	18,348	18,169
CLO, ABS, CMBS and RMBS	20,460	21,004
Total AFS fixed maturity securities	59,744	59,882
Fixed maturity securities – related party, CLO and ABS	1,250	1,243
Total AFS fixed maturity securities, including related party	$ 60,994	$ 61,125

Actual maturities can differ from contractual maturities as borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

Unrealized Losses on AFS Securities—The following summarizes the fair value and gross unrealized losses for AFS securities, including related party, aggregated by class of security and length of time the fair value has remained below amortized cost:

	September 30, 2018					
	Less than 12 months		12 months or more		Total	
(In millions)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
AFS securities						
U.S. government and agencies	$ 136	$ (1)	$ 2	$ —	$ 138	$ (1)
U.S. state, municipal and political subdivisions	191	(4)	82	(4)	273	(8)
Foreign governments	79	(2)	15	(1)	94	(3)
Corporate	19,563	(650)	3,765	(297)	23,328	(947)
CLO	3,049	(36)	124	(2)	3,173	(38)
ABS	1,982	(22)	551	(21)	2,533	(43)
CMBS	879	(16)	544	(32)	1,423	(48)
RMBS	437	(5)	186	(5)	623	(10)
Total AFS securities	26,316	(736)	5,269	(362)	31,585	(1,098)
AFS securities – related party						
CLO	306	(4)	—	—	306	(4)
ABS	137	(2)	103	(3)	240	(5)
Total AFS securities – related party	443	(6)	103	(3)	546	(9)
Total AFS securities, including related party	$ 26,759	$ (742)	$ 5,372	$ (365)	$ 32,131	$ (1,107)

	December 31, 2017					
	Less than 12 months		12 months or more		Total	
(In millions)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Fixed maturity securities						
U.S. government and agencies	$ 34	$ (1)	$ 9	$ (1)	$ 43	$ (2)
U.S. state, municipal and political subdivisions	50	(1)	39	(1)	89	(2)
Foreign governments	435	(6)	76	(2)	511	(8)
Corporate	3,992	(49)	2,457	(122)	6,449	(171)
CLO	414	(2)	340	(6)	754	(8)
ABS	515	(5)	549	(22)	1,064	(27)
CMBS	460	(8)	179	(13)	639	(21)
RMBS	506	(3)	210	(4)	716	(7)
Total fixed maturity securities	6,406	(75)	3,859	(171)	10,265	(246)
Equity securities[1]	134	(1)	—	—	134	(1)
Total AFS securities	6,540	(76)	3,859	(171)	10,399	(247)
AFS securities – related party						
CLO	29	—	—	—	29	—
ABS	42	—	—	—	42	—
Total AFS securities – related party	71	—	—	—	71	—
Total AFS securities, including related party	$ 6,611	$ (76)	$ 3,859	$ (171)	$ 10,470	$ (247)

[1] *Included in equity securities on the condensed consolidated balance sheets.*

As of September 30, 2018, we held 3,670 AFS securities that were in an unrealized loss position. Of this total, 855 were in an unrealized loss position 12 months or more. As of September 30, 2018, we held 27 related party AFS securities that were in an unrealized loss position. Of this total, five were in an unrealized loss position 12 months or more. The unrealized losses on AFS securities can primarily be attributed to changes in market interest rates since acquisition. We did not recognize the unrealized losses in income as we intend to hold these securities and it is not more likely than not we will be required to sell a security before the recovery of its amortized cost.

Other-Than-Temporary Impairments—For the nine months ended September 30, 2018, we incurred $6 million of net OTTI, of which $1 million related to intent-to-sell impairments. These securities were impaired to fair value as of the impairment date. The remaining net OTTI of $5 million related to credit impairments where a portion was bifurcated in AOCI. Any credit loss impairments not bifurcated in AOCI are excluded from the rollforward below.

The following table represents a rollforward of the cumulative amounts recognized on the condensed consolidated statements of income for OTTI related to pre-tax credit loss impairments on AFS fixed maturity securities, for which a portion of the securities' total OTTI was recognized in AOCI:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Beginning balance	$ 7	$ 16	$ 7	$ 16
Initial impairments – credit loss OTTI recognized on securities not previously impaired	3	4	4	10
Additional impairments – credit loss OTTI recognized on securities previously impaired	1	—	1	—
Reduction in impairments from securities sold, matured or repaid	(1)	(2)	(2)	(8)
Reduction for credit loss that no longer has a portion of the OTTI loss recognized in AOCI	—	(6)	—	(6)
Ending balance	$ 10	$ 12	$ 10	$ 12

Net Investment Income—Net investment income by asset class consists of the following:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Fixed maturity securities				
AFS securities	$ 730	$ 646	$ 2,117	$ 1,901
Trading securities	52	49	150	152
Equity securities	4	4	8	9
Mortgage loans	120	98	315	273
Investment funds	56	55	179	175
Funds withheld at interest	169	35	301	105
Other	28	18	74	56
Investment revenue	1,159	905	3,144	2,671
Investment expenses	(89)	(85)	(261)	(244)
Net investment income	$ 1,070	$ 820	$ 2,883	$ 2,427

Investment Related Gains (Losses)—Investment related gains (losses) by asset class consists of the following:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
AFS securities				
Gross realized gains on investment activity	$ 56	$ 31	$ 128	$ 94
Gross realized losses on investment activity	(50)	(10)	(93)	(31)
Net realized investment gains on AFS securities	6	21	35	63
Net realized investment gains (losses) on trading securities	(44)	(2)	(209)	26
Net realized investment gains (losses) on equity securities	(2)	3	2	23
Derivative gains	862	456	724	1,516
Other gains (losses)	1	(5)	33	(13)
Investment related gains (losses)	$ 823	$ 473	$ 585	$ 1,615

Proceeds from sales of AFS securities were $1,498 million and $1,863 million for the three months ended September 30, 2018 and 2017, respectively, and $5,500 million and $4,629 million for the nine months ended September 30, 2018 and 2017, respectively.

The following table summarizes the change in unrealized gains (losses) on trading and equity securities, including related party, we still held as of the respective period end:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Trading securities	$ (79)	$ 16	$ (118)	$ 75
Trading securities – related party	(12)	2	(18)	2
Equity securities	(2)	2	2	15

Purchased Credit Impaired (PCI) Investments—The following table summarizes our PCI investments:

	September 30, 2018	December 31, 2017	September 30, 2018	December 31, 2017
(In millions)	Fixed maturity securities		Mortgage loans	
Contractually required payments receivable	$ 8,393	$ 9,690	$ 2,009	$ 1,140
Less: Cash flows expected to be collected[1]	(7,402)	(8,188)	(1,971)	(1,090)
Non-accretable difference	$ 991	$ 1,502	$ 38	$ 50
Cash flows expected to be collected[1]	$ 7,402	$ 8,188	$ 1,971	$ 1,090
Less: Amortized cost	(5,698)	(6,168)	(1,456)	(817)
Accretable difference	$ 1,704	$ 2,020	$ 515	$ 273
Fair value	$ 6,193	$ 6,703	$ 1,481	$ 844
Outstanding balance	6,993	8,026	1,666	946

[1] *Represents the undiscounted principal and interest cash flows expected.*

During the period, we acquired PCI investments with the following amounts at the time of purchase:

	September 30, 2018	
(In millions)	Fixed maturity securities	Mortgage loans
Contractually required payments receivable	$ 493	$ 923
Cash flows expected to be collected	450	909
Fair value	364	678

The following table summarizes the activity for the accretable yield on PCI investments:

	Three months ended September 30, 2018		Nine months ended September 30, 2018	
(In millions)	Fixed maturity securities	Mortgage loans	Fixed maturity securities	Mortgage loans
Beginning balance	$ 1,784	$ 304	$ 2,020	$ 273
Purchases of PCI investments, net of sales	11	208	55	222
Accretion	(107)	(10)	(312)	(31)
Net reclassification from (to) non-accretable difference	16	13	(59)	51
Ending balance	$ 1,704	$ 515	$ 1,704	$ 515

Mortgage Loans, including related party—Mortgage loans, net of allowances, consists of the following:

(In millions)	September 30, 2018	December 31, 2017
Commercial mortgage loans	$ 6,596	$ 5,223
Commercial mortgage loans under development	74	24
Total commercial mortgage loans	6,670	5,247
Residential mortgage loans	2,701	986
Mortgage loans, net of allowances	$ 9,371	$ 6,233

We primarily invest in commercial mortgage loans on income producing properties including hotels, industrial properties and retail and office buildings. We diversify the commercial mortgage loan portfolio by geographic region and property type to reduce concentration risk. We evaluate mortgage loans based on relevant current information to confirm if properties are performing at a consistent and acceptable level to secure the related debt.

The distribution of commercial mortgage loans, including those under development, net of valuation allowances, by property type and geographic region, is as follows:

	September 30, 2018		December 31, 2017	
(In millions, except for percentages)	Net Carrying Value	Percentage of Total	Net Carrying Value	Percentage of Total
Property type				
Office building	$ 2,168	32.5%	$ 1,187	22.6%
Retail	1,693	25.4%	1,223	23.3%
Hotels	893	13.4%	928	17.7%
Industrial	833	12.5%	944	18.0%
Apartment	684	10.2%	525	10.0%
Other commercial	399	6.0%	440	8.4%
Total commercial mortgage loans	$ 6,670	100.0%	$ 5,247	100.0%
U.S. Region				
East North Central	$ 893	13.4%	$ 643	12.3%
East South Central	157	2.4%	144	2.7%
Middle Atlantic	1,034	15.5%	909	17.3%
Mountain	636	9.5%	492	9.4%
New England	329	4.9%	162	3.1%
Pacific	1,558	23.3%	991	18.9%
South Atlantic	1,224	18.4%	873	16.6%
West North Central	185	2.8%	233	4.4%
West South Central	654	9.8%	655	12.5%
Total U.S. Region	6,670	100.0%	5,102	97.2%
International Region	—	—%	145	2.8%
Total commercial mortgage loans	$ 6,670	100.0%	$ 5,247	100.0%

Our residential mortgage loan portfolio includes first lien residential mortgage loans collateralized by properties located in the U.S. As of September 30, 2018, California and Florida represented 32.5% and 21.0%, respectively, of the portfolio, and the remaining 46.5% represented all other states, with each individual state comprising less than 5% of the portfolio. As of December 31, 2017, California, Florida and New York represented 34.3%, 15.6% and 6.0%, respectively, of the portfolio, and the remaining 44.1% represented all other states, with each individual state comprising less than 5% of the portfolio.

Mortgage Loan Valuation Allowance—The assessment of mortgage loan impairments and valuation allowances is substantially the same for residential and commercial mortgage loans. The valuation allowance was $1 million as of September 30, 2018 and $2 million as of December 31, 2017. We did not record any material activity in the valuation allowance during the nine months ended September 30, 2018 or 2017.

Residential mortgage loans – The primary credit quality indicator of residential mortgage loans is loan performance. Nonperforming residential mortgage loans are 90 days or more past due and/or are in non-accrual status. As of September 30, 2018 and December 31, 2017, $37 million and $28 million, respectively, of our residential mortgage loans were non-performing.

Commercial mortgage loans – The following provides the aging of our commercial mortgage loan portfolio, including those under development, net of valuation allowances:

(In millions)	September 30, 2018	December 31, 2017
Current (less than 30 days past due)	$ 6,663	$ 5,247
61 to 90 days past due	1	—
Over 90 days past due	6	—
Total commercial mortgage loans	$ 6,670	$ 5,247

Loan-to-value and debt service coverage ratios are measures we use to assess the risk and quality of commercial mortgage loans other than those under development. Loans under development are not evaluated using these ratios as the properties underlying these loans are generally not yet income-producing and the value of the underlying property significantly fluctuates based on the progress of construction. Therefore, the risk and quality of loans under development are evaluated based on the aging and geographical distribution of such loans as shown above.

The loan-to-value ratio is expressed as a percentage of the amount of the loan relative to the value of the underlying property. A loan-to-value ratio in excess of 100% indicates the unpaid loan amount exceeds the underlying collateral. The following represents the loan-to-value ratio of the commercial mortgage loan portfolio, excluding those under development, net of valuation allowances:

(In millions)	September 30, 2018	December 31, 2017
Less than 50%	$ 1,805	$ 1,841
50% to 60%	1,776	1,390
61% to 70%	2,186	1,691
71% to 80%	764	239
81% to 100%	65	62
Commercial mortgage loans	$ 6,596	$ 5,223

The debt service coverage ratio, based upon the most recent financial statements, is expressed as a percentage of a property's net operating income to its debt service payments. A debt service ratio of less than 1.0 indicates a property's operations do not generate enough income to cover debt payments. The following represents the debt service coverage ratio of the commercial mortgage loan portfolio, excluding those under development, net of valuation allowances:

(In millions)	September 30, 2018	December 31, 2017
Greater than 1.20x	$ 6,158	$ 4,742
1.00x – 1.20x	246	297
Less than 1.00x	192	184
Commercial mortgage loans	$ 6,596	$ 5,223

Investment Funds—Our investment fund portfolio consists of funds that employ various strategies and include investments in real estate and other real assets, credit, private equity, natural resources and hedge funds. Investment funds typically meet the definition of VIEs and are discussed further in *Note 4 – Variable Interest Entities*.

3. Derivative Instruments

We use a variety of derivative instruments to manage risks, primarily equity, interest rate, credit, foreign currency and market volatility. See *Note 5 – Fair Value* for information about the fair value hierarchy for derivatives.

The following table presents the notional amount and fair value of derivative instruments:

	September 30, 2018			December 31, 2017		
		Fair Value			Fair Value	
(In millions)	Notional Amount	Assets	Liabilities	Notional Amount	Assets	Liabilities
Derivatives designated as hedges						
Foreign currency swaps	1,832	$ 31	$ 98	928	$ 1	$ 99
Interest rate swaps	—	—	—	302	—	—
Total derivatives designated as hedges		31	98		1	99
Derivatives not designated as hedges						
Equity options	38,381	2,468	15	31,460	2,500	19
Futures	3	5	—	1,134	7	—
Total return swaps	62	2	—	114	5	—
Foreign currency swaps	38	3	3	41	21	3
Interest rate swaps	451	—	1	385	—	2
Credit default swaps	10	—	4	10	—	5
Foreign currency forwards	588	6	3	1,139	17	6
Embedded derivatives						
Funds withheld	—	242	3	—	312	22
Interest sensitive contract liabilities	—	—	8,656	—	—	7,436
Total derivatives not designated as hedges		2,726	8,685		2,862	7,493
Total derivatives		$ 2,757	$ 8,783		$ 2,863	$ 7,592

Derivatives Designated as Hedges

Foreign currency swaps – We use foreign currency swaps to convert foreign currency denominated cash flows of an investment to U.S. dollars to reduce cash flow fluctuations due to changes in currency exchange rates. Certain of these swaps are designated and accounted for as cash flow hedges, which will expire by December 2045. During the three months ended September 30, 2018 and 2017, we had foreign currency swap gains of $7 million and losses of $31 million, respectively, recorded in AOCI. During the nine months ended September 30, 2018 and 2017, we had foreign currency swap gains of $52 million and losses of $69 million, respectively, recorded in AOCI. There were no amounts reclassified to income during the nine months ended September 30, 2018 and 2017. As of September 30, 2018, no amounts are expected to be reclassified to income within the next 12 months.

Derivatives Not Designated as Hedges

Equity options – We use equity indexed options to economically hedge fixed indexed annuity products that guarantee the return of principal to the policyholder and credit interest based on a percentage of the gain in a specified market index, primarily the S&P 500. To hedge against adverse changes in equity indices, we enter into contracts to buy equity indexed options. The contracts are net settled in cash based on differentials in the indices at the time of exercise and the strike price.

Futures – Futures contracts are purchased to hedge the growth in interest credited to the customer as a direct result of increases in the related indices. We enter into exchange-traded futures with regulated futures commission clearing brokers who are members of a trading exchange. Under exchange-traded futures contracts, we agree to purchase a specified number of contracts with other parties and to post variation margin on a daily basis in an amount equal to the difference in the daily fair values of those contracts.

Total return swaps – We purchase total rate of return swaps to gain exposure and benefit from a reference asset or index without ownership. Total rate of return swaps are contracts in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of the underlying asset or index, which includes both the income it generates and any capital gains.

Interest rate swaps – We use interest rate swaps to reduce market risks from interest rate changes and to alter interest rate exposure arising from duration mismatches between assets and liabilities. With an interest rate swap, we agree with another party to exchange the difference between fixed-rate and floating-rate interest amounts tied to an agreed-upon notional principal amount at specified intervals. Certain of these swaps entered into during the fourth quarter of 2016 were designated as fair value hedges. These fair value hedges were dedesignated during the second quarter of 2018 and there was no material impact as a result.

Credit default swaps – Credit default swaps provide a measure of protection against the default of an issuer or allow us to gain credit exposure to an issuer or traded index. We use credit default swaps coupled with a bond to synthetically create the characteristics of a reference bond. These transactions have a lower cost and are generally more liquid relative to the cash market. We receive a periodic premium for these transactions as compensation for accepting credit risk.

Hedging credit risk involves buying protection for existing credit risk. The exposure resulting from the agreements, which is usually the notional amount, is equal to the maximum proceeds that must be paid by a counterparty for a defaulted security. If a credit event occurs on a reference entity, then a counterparty who sold protection is required to pay the buyer the trade notional amount less any recovery value of the security.

Foreign currency forwards – We use foreign currency forward contracts to hedge certain exposures to foreign currency risk. The price is agreed upon at the time of the contract and payment is made at a specified future date.

Embedded derivatives – We have embedded derivatives which are required to be separated from their host contracts and reported as derivatives. Host contracts include reinsurance agreements structured on a modified coinsurance (modco) or funds withheld basis and indexed annuity products.

The following is a summary of the gains (losses) related to derivatives not designated as hedges:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Equity options	$ 756	$ 367	$ 703	$ 1,154
Futures	1	(5)	(3)	(19)
Swaps	1	8	(6)	22
Foreign currency forwards	3	4	10	24
Embedded derivatives on funds withheld	101	82	20	335
Amounts recognized in investment related gains (losses)	862	456	724	1,516
Embedded derivatives in indexed annuity products[1]	(324)	(344)	(140)	(1,077)
Total gains (losses) on derivatives not designated as hedges	$ 538	$ 112	$ 584	$ 439

[1] *Included in interest sensitive contract benefits.*

Credit Risk—We may be exposed to credit-related losses in the event of counterparty nonperformance on derivative financial instruments. Generally, the current credit exposure of our derivative contracts is the fair value at the reporting date less any collateral received from the counterparty.

We manage credit risk related to over-the-counter derivatives by entering into transactions with creditworthy counterparties. Where possible, we maintain collateral arrangements and use master netting agreements that provide for a single net payment from one counterparty to another at each due date and upon termination. We have also established counterparty exposure limits, where possible, in order to evaluate if there is sufficient collateral to support the net exposure.

Collateral arrangements typically require the posting of collateral in connection with its derivative instruments. Collateral agreements often contain posting thresholds, some of which may vary depending on the posting party's financial strength ratings. Additionally, a decrease in our financial strength rating to a specified level can result in settlement of the derivative position.

The estimated fair value of our net derivative and other financial assets and liabilities after the application of master netting agreements and collateral were as follows:

		Gross amounts not offset on the condensed consolidated balance sheets				
(In millions)	Gross amount recognized[1]	Financial instruments[2]	Collateral received/pledged	Net amount	Off-balance sheet securities collateral[3]	Net amount after securities collateral
September 30, 2018						
Derivative assets	$ 2,515	$ (63)	$ (2,315)	$ 137	$ (128)	$ 9
Derivative liabilities	(124)	63	67	6	—	6
December 31, 2017						
Derivative assets	$ 2,551	$ (59)	$ (2,323)	$ 169	$ (221)	$ (52)
Derivative liabilities	(134)	59	63	(12)	—	(12)

1 *The gross amounts of recognized derivative assets and derivative liabilities are reported on the condensed consolidated balance sheets. As of September 30, 2018 and December 31, 2017, amounts not subject to master netting or similar agreements were immaterial.*

2 *Represents amounts offsetting derivative assets and derivative liabilities that are subject to an enforceable master netting agreement or similar agreement that are not netted against the gross derivative assets or gross derivative liabilities for presentation on the condensed consolidated balance sheets.*

3 *For non-cash collateral received, we do not recognize the collateral on our balance sheet unless the obligor (transferor) has defaulted under the terms of the secured contract and is no longer entitled to redeem the pledged asset. Amounts do not include any excess of collateral pledged or received.*

4. Variable Interest Entities

Our investment funds typically meet the definition of a VIE, and in certain cases these investment funds are consolidated in our financial statements because we meet the criteria of the primary beneficiary.

Consolidated VIEs—We consolidate AAA Investments (Co-Invest VI), L.P. (CoInvest VI), AAA Investments (Co-Invest VII), L.P. (CoInvest VII), AAA Investments (Other), L.P. (CoInvest Other), NCL Athene, LLC (NCL LLC) and ALR Aircraft Investment Ireland Limited (ALR), which are investment funds. We are the only limited partner, Class A member or holder of profit participating notes in these investment funds and receive all of the economic benefits and losses, other than management fees and carried interest, as applicable, paid to the general partner in each entity, or a related entity, which are related parties. We do not have any voting rights as limited partner and, as the limited partner, Class A member or holder of profit participating notes, do not solely satisfy the power criteria to direct the activities that significantly impact the economics of the VIE. However, the criteria for the primary beneficiary are satisfied by our related party group and, because substantially all of the activities are conducted on our behalf, we consolidate the investment funds.

No arrangement exists requiring us to provide additional funding in excess of our committed capital investment, liquidity, or the funding of losses or an increase to our loss exposure in excess of our investment in the VIEs. We elected the fair value option for certain fixed maturity and equity securities, and investment funds, which are reported in the consolidated variable interest entity sections on the condensed consolidated balance sheets.

CoInvest VI, CoInvest VII and CoInvest Other were formed to make investments, including co-investments alongside private equity funds sponsored by Apollo. Investments held by CoInvest VI, CoInvest VII and CoInvest Other are related party investments because Apollo affiliates exercise significant influence over the management or operations of the investees. We received our interests in CoInvest VI, CoInvest VII and CoInvest Other as part of a contribution agreement in 2012 with AAA Guarantor – Athene, L.P. (AAA Investor) and its subsidiary, Apollo Life Re Ltd., in order to provide a capital base to support future acquisitions.

CoInvest VII holds a significant investment in MidCap FinCo Limited (MidCap), which is included in investment funds of consolidated VIEs on the condensed consolidated balance sheets. We have purchased pools of loans sourced by MidCap and contemporaneously sold subordinated participation interests in the loans to a subsidiary of MidCap. As of September 30, 2018 and December 31, 2017, we had $0 million and $14 million, respectively, due to MidCap under the subordinated participation agreement which was reflected as a secured borrowing in other liabilities on the condensed consolidated balance sheets. In addition, we have advanced amounts under a subordinated debt facility to MidCap and, as of September 30, 2018 and December 31, 2017, the principal balance was $245 million, and this is included in other related party investments on the condensed consolidated balance sheets.

NCL LLC was formed to hold the investment in Norwegian Cruise Line Holdings Ltd. (NCLH) shares, which were previously held by CoInvest VI. NCL LLC is subject to the same management fees, selling restrictions with respect to shares of NCLH, and carried interest calculation as CoInvest VI. NCL LLC classifies its NCLH shares as related party equity securities. We are the primary beneficiary and consolidate NCL LLC, as substantially all of its activities are conducted on our behalf.

During the first quarter of 2018, we invested in profit participating notes of ALR. ALR was formed to invest in a joint venture that provides airplane lease financing to a major commercial airline. We are the only investor in the profit participating notes and, as substantially all of the activities of ALR are conducted on our behalf, we are the primary beneficiary and consolidate ALR.

Trading securities – related party – Trading securities represents investments in fixed maturity securities with changes in fair value recognized in investment related gains (losses) within revenues of consolidated variable interest entities on the condensed consolidated statements of income.

Equity securities – related party – Changes in fair value of equity securities are recognized in investment related gains (losses) within revenues of consolidated variable interest entities on the condensed consolidated statements of income. Prior period unrealized changes in fair value of equity securities designated as AFS were recognized in OCI.

The following table summarizes the change in unrealized gains (losses) on trading and equity securities of our consolidated variable interest entities still held as of the respective period end:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Trading securities – related party	$ —	$ 1	$ 1	$ 2
Equity securities – related party	13	7	(26)	12

Investment funds, including related party – Investment funds include non-fixed income, alternative investments in the form of limited partnerships or similar legal structures that meet the definition of VIEs; however, our consolidated VIEs are not considered the primary beneficiary of these investment funds. Changes in fair value for these investment funds are included in investment related gains (losses) within revenues of consolidated variable interest entities on the condensed consolidated statements of income.

Fair Value—See *Note 5 – Fair Value* for a description of the levels of our fair value hierarchy and our process for determining the level we assign our assets and liabilities carried at fair value.

The following represents the hierarchy for assets and liabilities of our consolidated VIEs measured at fair value on a recurring basis:

	September 30, 2018				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Assets of consolidated VIEs					
Investments					
Fixed maturity securities, trading	$ 48	$ —	$ —	$ —	$ 48
Equity securities	176	—	151	—	25
Investment funds	564	549	—	—	15
Cash and cash equivalents	2	—	2	—	—
Total assets of consolidated VIEs measured at fair value	$ 790	$ 549	$ 153	$ —	$ 88

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

	December 31, 2017				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Assets of consolidated VIEs					
Investments					
Fixed maturity securities, trading	$ 48	$ —	$ —	$ —	$ 48
Equity securities	240	—	212	—	28
Investment funds	549	528	—	—	21
Cash and cash equivalents	4	—	4	—	—
Total assets of consolidated VIEs measured at fair value	$ 841	$ 528	$ 216	$ —	$ 97

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

Fair Value Valuation Methods – See *Note 5 – Fair Value* for the valuation methods used to determine the fair value of trading securities, equity securities, investment funds and cash and cash equivalents.

Level 3 Financial Instruments – The following is a reconciliation for all consolidated VIE Level 3 assets and liabilities measured at fair value on a recurring basis:

	Three months ended September 30, 2018						
(In millions)	Beginning Balance	Total realized and unrealized gains (losses) included in income	Purchases	Sales	Transfers in (out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets of consolidated VIEs							
Trading securities	$ 48	$ —	$ —	$ —	$ —	$ 48	$ —
Equity securities	26	(1)	—	—	—	25	(1)
Investment funds	1	—	14	—	—	15	—
Total Level 3 assets of consolidated VIEs	$ 75	$ (1)	$ 14	$ —	$ —	$ 88	$ (1)

[1] *Related to instruments held at end of period.*

	Three months ended September 30, 2017						
(In millions)	Beginning Balance	Total realized and unrealized gains (losses) included in income	Purchases	Sales	Transfers in (out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets of consolidated VIEs							
Trading securities	$ 51	$ —	$ —	$ (1)	$ —	$ 50	$ —
Equity securities	30	(1)	—	—	—	29	(1)
Investment funds	33	—	—	—	—	33	—
Total Level 3 assets of consolidated VIEs	$ 114	$ (1)	$ —	$ (1)	$ —	$ 112	$ (1)

[1] *Related to instruments held at end of period.*

	Nine months ended September 30, 2018						
(In millions)	Beginning Balance	Total realized and unrealized gains (losses) included in income	Purchases	Sales	Transfers in (out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets of consolidated VIEs							
Trading securities	$ 48	$ 1	$ —	$ (1)	$ —	$ 48	$ 1
Equity securities	28	(3)	—	—	—	25	(3)
Investment funds	21	(3)	14	(17)	—	15	(3)
Total Level 3 assets of consolidated VIEs	$ 97	$ (5)	$ 14	$ (18)	$ —	$ 88	$ (5)

[1] *Related to instruments held at end of period.*

	Nine months ended September 30, 2017						
(In millions)	Beginning Balance	Total realized and unrealized gains (losses) included in income	Purchases	Sales	Transfers in (out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets of consolidated VIEs							
Trading securities	$ 50	$ 1	$ —	$ (1)	$ —	$ 50	$ 1
Equity securities	43	(15)	1	—	—	29	(15)
Investment funds	38	—	1	(6)	—	33	—
Total Level 3 assets of consolidated VIEs	$ 131	$ (14)	$ 2	$ (7)	$ —	$ 112	$ (14)

[1] *Related to instruments held at end of period.*

There were no transfers between Level 1 or Level 2 during the three and nine months ended September 30, 2018 and 2017.

Significant Unobservable Inputs – For certain Level 3 trading and equity securities and investment funds, the valuations have significant unobservable inputs, which may include, but are not limited to, comparable multiples and weighted average cost of capital rates. These inputs in isolation can cause significant increases or decreases in fair value. Comparable multiples may be multiplied by the underlying investment's earnings before interest, tax, depreciation and amortization or by some other applicable financial metric to establish the total enterprise value of the underlying investments. A comparable multiple consistent with the implied trading multiple of public industry peers or relevant recent private transactions are used when available.

For certain other Level 3 trading securities, valuations are performed using a discounted cash flow model. For a discounted cash flow model, the significant input is the discount rate applied to determine the present value of the projected cash flows. An increase in the discount rate can significantly lower the fair value; a decrease in the discount rate can significantly increase the fair value. The discount rate may be determined by considering the weighted average cost of capital calculation of companies in similar industries with comparable debt to equity ratios.

Fair Value Option – The following represents the gains (losses) recorded for instruments within the consolidated VIEs for which we have elected the fair value option:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Trading securities	$ —	$ —	$ 1	$ 1
Investment funds	9	—	18	5
Total gains (losses)	$ 9	$ —	$ 19	$ 6

Fair Value of Financial Instruments Not Held at Fair Value – Assets of consolidated variable interest entities includes $41 million and $22 million of investment funds accounted for under the equity method and not carried at fair value as of September 30, 2018 and December 31, 2017, respectively; however, the carrying amount approximates fair value.

Non-Consolidated Securities and Investment Funds

Fixed maturity securities – We invest in securitization entities as a debt holder or an investor in the residual interest of the securitization vehicle, which are included in fixed maturity securities on the condensed consolidated balance sheets. These entities are deemed VIEs due to insufficient equity within the structure and lack of control by the equity investors over the activities that significantly impact the economics of the entity. In general, we are a debt investor within these entities and, as such, hold a variable interest; however, due to the debt holders' lack of ability to control the decisions within the trust that significantly impact the entity, and the fact the debt holders are protected from losses due to the subordination of the equity tranche, the debt holders are not deemed the primary beneficiary. Securitization vehicles in which we hold the residual tranche are not consolidated because we do not unilaterally have substantive rights to remove the general partner, or when assessing related party interests, we are not under common control, as defined by GAAP, with the related party, nor are substantially all of the activities conducted on our behalf; therefore, we are not deemed the primary beneficiary. Debt investments and investments in the residual tranche of securitization entities are considered debt instruments and are held at fair value on the balance sheet and classified as AFS or trading.

Investment funds – Investment funds include non-fixed income, alternative investments in the form of limited partnerships or similar legal structures.

Our risk of loss associated with our non-consolidated investments depends on the investment. Investment funds and trading securities are limited to the carrying value plus unfunded commitments. AFS securities are limited to amortized cost plus unfunded commitments. The following summarizes the carrying value and maximum loss exposure of these non-consolidated investments:

	September 30, 2018		December 31, 2017	
(In millions)	Carrying Value	Maximum Loss Exposure	Carrying Value	Maximum Loss Exposure
Investment funds	$ 692	$ 1,284	$ 699	$ 1,036
Investment in related parties – investment funds	2,093	4,439	1,310	2,598
Assets of consolidated variable interest entities – investment funds	605	606	571	594
Investment in fixed maturity securities	21,554	21,010	21,022	20,278
Investment in related parties – fixed maturity securities	1,502	1,631	713	792
Total non-consolidated investments	$ 26,446	$ 28,970	$ 24,315	$ 25,298

The following summarizes our investment funds, including related party investment funds and investment funds owned by consolidated VIEs:

	September 30, 2018			December 31, 2017		
(In millions, except for percentages and years)	Carrying value	Percent of total	Remaining life in years	Carrying value	Percent of total	Remaining life in years
Investment funds						
Private equity	$ 254	36.7%	0 – 5	$ 271	38.8%	0 – 7
Real estate and other real assets	205	29.6%	0 – 6	161	23.0%	1 – 7
Natural resources	4	0.6%	0 – 0	4	0.6%	1 – 1
Hedge funds	50	7.2%	0 – 1	61	8.7%	0 – 3
Credit funds	179	25.9%	0 – 4	202	28.9%	0 – 5
Total investment funds	692	100.0%		699	100.0%	
Investment funds – related parties						
Private equity – A-A Mortgage[1]	449	21.5%	5 – 5	403	30.8%	5 – 5
Private equity – other	680	32.5%	0 – 9	180	13.7%	0 – 10
Real estate and other real assets	499	23.8%	0 – 10	297	22.7%	0 – 7
Natural resources	95	4.5%	3 – 4	74	5.6%	4 – 6
Hedge funds	98	4.7%	11 – 11	93	7.1%	9 – 9
Credit funds	272	13.0%	0 – 3	263	20.1%	2 – 4
Total investment funds – related parties	2,093	100.0%		1,310	100.0%	
Investment funds owned by consolidated VIEs						
Private equity – MidCap[2]	549	90.7%	N/A	528	92.5%	N/A
Credit funds	1	0.2%	0 – 1	21	3.7%	0 – 3
Real estate and other real assets	55	9.1%	0 – 6	22	3.8%	2 – 3
Total investment funds owned by consolidated VIEs	605	100.0%		571	100.0%	
Total investment funds including related parties and funds owned by consolidated VIEs	$ 3,390			$ 2,580		

[1] *A-A Mortgage Opportunities, L.P. (A-A Mortgage) is a platform to originate residential mortgage loans and mortgage servicing rights. Our total investment in A-A Mortgage, including amounts loaned to A-A Mortgage affiliates, was $459 million and $455 million as of September 30, 2018 and December 31, 2017, respectively.*

[2] *Our total investment in MidCap, including amounts advanced under credit facilities, was $788 million and $766 million as of September 30, 2018 and December 31, 2017, respectively.*

Summarized Ownership of Investment Funds—The following table presents the carrying value by ownership percentage of equity method investment funds, including related party investment funds and investment funds owned by consolidated VIEs:

(In millions)	September 30, 2018	December 31, 2017
Ownership Percentage		
100%	$ 16	$ 35
50% – 99%	1,039	520
3% – 49%	1,515	1,301
Equity method investment funds	$ 2,570	$ 1,856

The following table presents the carrying value by ownership percentage of investment funds where we elected the fair value option, including related party investment funds and investment funds owned by consolidated VIEs:

(In millions)	September 30, 2018	December 31, 2017
Ownership Percentage		
3% – 49%	$ 685	$ 590
Less than 3%	135	134
Fair value option investment funds	$ 820	$ 724

5. Fair Value

Fair value is the price we would receive to sell an asset or pay to transfer a liability (exit price) in an orderly transaction between market participants. We determine fair value based on the following fair value hierarchy:

Level 1 – Unadjusted quoted prices for identical assets or liabilities in an active market.

Level 2 – Quoted prices for inactive markets or valuation techniques that require observable direct or indirect inputs for substantially the full term of the asset or liability. Level 2 inputs include the following:

- Quoted prices for similar assets or liabilities in active markets,
- Observable inputs other than quoted market prices, and
- Observable inputs derived principally from market data through correlation or other means.

Level 3 – Prices or valuation techniques with unobservable inputs significant to the overall fair value estimate. These valuations use critical assumptions not readily available to market participants. Level 3 valuations are based on market standard valuation methodologies, including discounted cash flows, matrix pricing or other similar techniques.

The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the instrument's fair value measurement.

We use a number of valuation sources to determine fair values. Valuation sources can include quoted market prices; third-party commercial pricing services; third-party brokers; industry-standard, vendor modeling software that uses market observable inputs; and other internal modeling techniques based on projected cash flows. We periodically review the assumptions and inputs of third-party commercial pricing services through internal valuation price variance reviews, comparisons to internal pricing models, back testing to recent trades, or monitoring trading volumes.

The following represents the hierarchy for our assets and liabilities measured at fair value on a recurring basis:

	September 30, 2018				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Assets					
Fixed maturity securities					
AFS securities					
U.S. government and agencies	$ 142	$ —	$ 140	$ 2	$ —
U.S. state, municipal and political subdivisions	1,237	—	—	1,237	—
Foreign governments	180	—	—	180	—
Corporate	37,319	—	—	36,355	964
CLO	5,302	—	—	4,962	340
ABS	4,855	—	—	3,357	1,498
CMBS	2,324	—	—	2,142	182
RMBS	8,523	—	—	8,523	—
Total AFS securities	59,882	—	140	56,758	2,984
Trading securities					
U.S. government and agencies	5	—	3	2	—
U.S. state, municipal and political subdivisions	124	—	—	107	17
Corporate	1,298	—	—	1,298	—
CLO	13	—	—	10	3
ABS	89	—	—	89	—
CMBS	49	—	—	49	—
RMBS	399	—	—	114	285
Total trading securities	1,977	—	3	1,669	305
Equity securities	292	—	4	286	2
Mortgage loans	37	—	—	—	37
Investment funds	127	97	—	—	30
Funds withheld at interest – embedded derivative	151	—	—	—	151
Derivative assets	2,515	—	5	2,510	—
Short-term investments	234	—	64	170	—
Other investments	43	—	—	43	—
Cash and cash equivalents	3,723	—	3,723	—	—
Restricted cash	218	—	218	—	—
Investments in related parties					
Fixed maturity securities					
AFS securities					
CLO	609	—	—	571	38
ABS	634	—	—	430	204
Total AFS securities – related party	1,243	—	—	1,001	242
Trading securities					
CLO	108	—	—	32	76
ABS	151	—	—	—	151
Total trading securities – related party	259	—	—	32	227
Investment funds	197	92	—	—	105
Funds withheld at interest – embedded derivative	91	—	—	—	91
Short-term investments	10	—	—	—	10
Reinsurance recoverable	1,679	—	—	—	1,679
Total assets measured at fair value	$ 72,678	$ 189	$ 4,157	$ 62,469	$ 5,863

(Continued)

	September 30, 2018				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ 8,656	$ —	$ —	$ —	$ 8,656
Universal life benefits	901	—	—	—	901
Future policy benefits					
AmerUs Closed Block	1,469	—	—	—	1,469
ILICO Closed Block and life benefits	764	—	—	—	764
Derivative liabilities	124	—	—	120	4
Funds withheld liability – embedded derivative	3	—	—	3	—
Total liabilities measured at fair value	$ 11,917	$ —	$ —	$ 123	$ 11,794

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

(Concluded)

	December 31, 2017				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Assets					
Fixed maturity securities					
AFS securities					
U.S. government and agencies	$ 62	$ —	$ 26	$ 36	$ —
U.S. state, municipal and political subdivisions	1,165	—	—	1,165	—
Foreign governments	2,683	—	—	2,683	—
Corporate	36,660	—	—	36,082	578
CLO	5,084	—	—	5,020	64
ABS	3,971	—	—	2,510	1,461
CMBS	2,021	—	—	1,884	137
RMBS	9,366	—	—	9,065	301
Total AFS securities	61,012	—	26	58,445	2,541
Trading securities					
U.S. government and agencies	3	—	3	—	—
U.S. state, municipal and political subdivisions	138	—	—	121	17
Corporate	1,475	—	—	1,475	—
CLO	27	—	—	10	17
ABS	94	—	—	17	77
CMBS	51	—	—	51	—
RMBS	408	—	—	66	342
Total trading securities	2,196	—	3	1,740	453

(Continued)

	December 31, 2017				
(In millions)	Total	NAV[1]	Level 1	Level 2	Level 3
Equity securities	790	—	18	764	8
Mortgage loans	41	—	—	—	41
Investment funds	145	104	—	—	41
Funds withheld at interest – embedded derivative	312	—	—	—	312
Derivative assets	2,551	—	7	2,544	—
Short-term investments	201	—	40	161	—
Cash and cash equivalents	4,888	—	4,888	—	—
Restricted cash	105	—	105	—	—
Investments in related parties					
Fixed maturity securities					
AFS securities					
CLO	360	—	—	360	—
ABS	46	—	—	46	—
Total AFS securities – related party	406	—	—	406	—
Trading securities					
CLO	132	—	—	27	105
ABS	175	—	—	175	—
Total trading securities – related party	307	—	—	202	105
Investment funds	30	30	—	—	—
Short-term investments	52	—	—	52	—
Reinsurance recoverable	1,824	—	—	—	1,824
Total assets measured at fair value	$ 74,860	$ 134	$ 5,087	$ 64,314	$ 5,325
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ 7,436	$ —	$ —	$ —	$ 7,436
Universal life benefits	1,005	—	—	—	1,005
Unit-linked contracts	488	—	—	488	—
Future policy benefits					
AmerUs Closed Block	1,625	—	—	—	1,625
ILICO Closed Block and life benefits	803	—	—	—	803
Derivative liabilities	134	—	—	129	5
Funds withheld liability – embedded derivative	22	—	—	22	—
Total liabilities measured at fair value	$ 11,513	$ —	$ —	$ 639	$ 10,874

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

(Concluded)

See *Note 4 – Variable Interest Entities* for fair value disclosures associated with consolidated VIEs.

Fair Value Valuation Methods—We used the following valuation methods and assumptions to estimate fair value:

Fixed maturity – AFS and trading securities – We obtain the fair value for most marketable securities without an active market from several commercial pricing services. These are classified as Level 2 assets. The pricing services incorporate a variety of market observable information in their valuation techniques, including benchmark yields, trading activity, credit quality, issuer spreads, bids, offers and other reference data. This category typically includes U.S. and non-U.S. corporate bonds, U.S. agency and government guaranteed securities, CLO, ABS, CMBS and RMBS.

We value privately placed fixed maturity securities based on the credit quality and duration of comparable marketable securities, which may be securities of another issuer with similar characteristics. In some instances, we use a matrix-based pricing model. These models consider the current level of risk-free interest rates, corporate spreads, credit quality of the issuer and cash flow characteristics of the security. We also consider additional factors such as net worth of the borrower, value of collateral, capital structure of the borrower, presence of guarantees and our evaluation of the borrower’s ability to compete in its relevant market. Privately placed fixed maturity securities are classified as Level 2 or 3.

Equity securities – Fair values of publicly traded equity securities are based on quoted market prices and classified as Level 1. Other equity securities, typically private equities or equity securities not traded on an exchange, we value based on other sources, such as commercial pricing services or brokers and are classified as Level 2 or 3.

Mortgage loans – Mortgage loans for which we have elected the fair value option or those held for sale are carried at fair value. We estimate fair value on a monthly basis using discounted cash flow analysis and rates being offered for similar loans to borrowers with similar credit ratings. Loans with similar characteristics are aggregated for purposes of the calculations. The discounted cash flow model uses unobservable inputs, including estimates of discount rates and loan prepayments. Mortgage loans are classified as Level 3.

Funds withheld (embedded derivative) – We estimate the fair value of the embedded derivative based on the change in the fair value of the assets supporting the funds withheld payable under the combined coinsurance, modco and coinsurance funds withheld reinsurance agreements. As a result, the fair value of the embedded derivative is classified as Level 2 or 3 based on the valuation methods used for the assets held in trust supporting the reinsurance agreements.

Derivatives – Derivative contracts can be exchange traded or over-the-counter. Exchange-traded derivatives typically fall within Level 1 of the fair value hierarchy depending on trading activity. Over-the-counter derivatives are valued using valuation models or an income approach using third-party broker valuations. Valuation models require a variety of inputs, including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlation of the inputs. We consider and incorporate counterparty credit risk in the valuation process through counterparty credit rating requirements and monitoring of overall exposure. We also evaluate and include our own nonperformance risk in valuing derivatives. The majority of our derivatives trade in liquid markets; therefore, we can verify model inputs and model selection does not involve significant management judgment. These are typically classified within Level 2 of the fair value hierarchy.

Cash and cash equivalents – including restricted cash – The carrying amount for cash equals fair value. We estimate the fair value for cash equivalents based on quoted market prices. These assets are classified as Level 1.

Interest sensitive contract liabilities (embedded derivative) – Embedded derivatives related to interest sensitive contract liabilities with fixed indexed annuity products are classified as Level 3. The valuations include significant unobservable inputs associated with economic assumptions and actuarial assumptions for policyholder behavior.

Unit-linked contracts – Unit-linked contracts are valued based on the fair value of the investments supporting the contract. The underlying investments are trading securities comprised primarily of mutual funds. The valuations of these are based on quoted market prices for similar assets and are classified as Level 2, resulting in a corresponding classification for the unit-linked contracts.

AmerUs Closed Block – We elected the fair value option for the future policy benefits liability in the AmerUs Closed Block. Our valuation technique is to set the fair value of policyholder liabilities equal to the fair value of assets. There is an additional component which captures the fair value of the open block's obligations to the closed block business. This component is the present value of the projected release of required capital and future earnings before income taxes on required capital supporting the AmerUs Closed Block, discounted at a rate which represents a market participant's required rate of return, less the initial required capital. Unobservable inputs include estimates for these items. The AmerUs Closed Block policyholder liabilities and any corresponding reinsurance recoverable are classified as Level 3.

ILICO Closed Block – We elected the fair value option for the ILICO Closed Block. Our valuation technique is to set the fair value of policyholder liabilities equal to the fair value of assets. There is an additional component which captures the fair value of the open block's obligations to the closed block business. This component uses the present value of future cash flows which include commissions, administrative expenses, reinsurance premiums and benefits, and an explicit cost of capital. The discount rate includes a margin to reflect the business and non-performance risk. Unobservable inputs include estimates for these items. The ILICO Closed Block policyholder liabilities and corresponding reinsurance recoverable are classified as Level 3.

Universal life liabilities and other life benefits – We elected the fair value option for certain blocks of universal and other life business ceded to Global Atlantic Financial Group Limited (together with its subsidiaries, Global Atlantic). We use a present value of liability cash flows. Unobservable inputs include estimates of mortality, persistency, expenses, premium payments and a risk margin used in the discount rates that reflects the riskiness of the business. These universal life policyholder liabilities and corresponding reinsurance recoverable are classified as Level 3.

Fair Value Option—The following represents the gains (losses) recorded for instruments for which we have elected the fair value option:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Trading securities	$ (43)	$ (2)	$ (208)	$ 25
Mortgage loans	—	(1)	—	(1)
Investment funds, including related party investment funds	4	5	10	19
Future policy benefits	21	5	156	(10)
Total gains (losses)	$ (18)	$ 7	$ (42)	$ 33

Gains and losses on trading and equity securities are recorded in investment related gains (losses) on the condensed consolidated statements of income. Prior period unrealized gains and losses on equity securities designated as AFS were recorded in OCI. For fair value option mortgage loans, we record interest income in net investment income and subsequent changes in fair value in investment related gains (losses) on the condensed consolidated statements of income. Gains and losses related to investment funds, including related party investment funds, are recorded in net investment income on the condensed consolidated statements of income. We record the change in fair value of future policy benefits to future policy and other policy benefits on the condensed consolidated statements of income.

The following summarizes information for fair value option mortgage loans:

(In millions)	September 30, 2018	December 31, 2017
Unpaid principal balance	$ 36	$ 40
Mark to fair value	1	1
Fair value	$ 37	$ 41

There were no fair value option mortgage loans 90 days or more past due as of September 30, 2018 and December 31, 2017.

Transfers Between Levels—Transfers into Level 3 generally represent securities that were valued using pricing sources which, due to changing market conditions, were less observable than in prior periods as indicated by the increased volatility, which was reflected in vendor prices obtained for individual securities. Additionally, changes in pricing sources also led to securities transferring into Level 3.

Transfers out of Level 3 generally represent securities that were valued using pricing sources which, due to changing market conditions, were more observable than in prior periods as indicated by decreased volatility, which was reflected in vendor prices obtained for individual securities. Additionally, changes in pricing sources also led to securities transferring into Level 2.

Transfers into or out of any level are assumed to occur at the end of the period. For the three and nine months ended September 30, 2018 and 2017, there were no material transfers between Level 1 and Level 2.

Level 3 Financial Instruments—The following is a reconciliation for all Level 3 assets and liabilities measured at fair value on a recurring basis:

	Three months ended September 30, 2018							
		Total realized and unrealized gains (losses)			Transfers			
(In millions)	Beginning Balance	Included in income	Included in OCI	Net purchases, issuances, sales and settlements	In	(Out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets								
Fixed maturity securities								
AFS securities								
Corporate	$ 962	$ (1)	$ (3)	$ 110	$ 5	$ (109)	$ 964	$ —
CLO	281	—	(1)	52	8	—	340	—
ABS	1,451	1	1	178	161	(294)	1,498	—
CMBS	197	—	(1)	—	—	(14)	182	—
RMBS	7	—	—	—	—	(7)	—	—
Trading securities								
U.S. state, municipal and political subdivisions	17	—	—	—	—	—	17	—
Corporate	4	—	—	—	—	(4)	—	—
CLO	26	(2)	—	(11)	—	(10)	3	1
ABS	89	1	—	—	—	(90)	—	1
RMBS	304	(19)	—	—	—	—	285	2
Equity securities	2	—	—	—	—	—	2	—
Mortgage loans	38	—	—	(1)	—	—	37	—
Investment funds	31	(1)	—	—	—	—	30	(1)
Funds withheld at interest – embedded derivative	150	1	—	—	—	—	151	—
Investments in related parties								
Fixed maturity securities								
AFS securities								
CLO	39	—	(1)	—	—	—	38	—
ABS	46	—	—	158	—	—	204	—
Trading securities								
CLO	114	(7)	—	—	—	(31)	76	(5)
ABS	164	(4)	—	(9)	—	—	151	(4)
Investment funds	105	—	—	—	—	—	105	—
Funds withheld at interest – embedded derivative	162	(71)	—	—	—	—	91	—
Short-term investments	10	—	—	—	—	—	10	—
Reinsurance recoverable	1,717	(38)	—	—	—	—	1,679	—
Total Level 3 assets	$ 5,916	$ (140)	$ (5)	$ 477	$ 174	$ (559)	$ 5,863	$ (6)
Liabilities								
Interest sensitive contract liabilities								
Embedded derivative	$ (8,065)	$ (324)	$ —	$ (267)	$ —	$ —	$ (8,656)	$ —
Universal life benefits	(943)	42	—	—	—	—	(901)	—
Future policy benefits								
AmerUs Closed Block	(1,490)	21	—	—	—	—	(1,469)	—
ILICO Closed Block and life benefits	(759)	(5)	—	—	—	—	(764)	—
Derivative liabilities	(5)	1	—	—	—	—	(4)	—
Total Level 3 liabilities	$ (11,262)	$ (265)	$ —	$ (267)	$ —	$ —	$ (11,794)	$ —

[1] *Related to instruments held at end of period.*

	Three months ended September 30, 2017							
		Total realized and unrealized gains (losses)			Transfers			
(In millions)	Beginning Balance	Included in income	Included in OCI	Net purchases, issuances, sales and settlements	In	(Out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets								
Fixed maturity securities								
AFS securities								
Foreign governments	$ 14	$ —	$ —	$ —	$ —	$ (14)	$ —	$ —
Corporate	452	5	—	(13)	37	(12)	469	—
CLO	81	—	1	47	86	(19)	196	—
ABS	1,093	3	1	240	83	(41)	1,379	—
CMBS	122	1	(1)	(18)	26	(43)	87	—
RMBS	312	1	13	(11)	14	(7)	322	—
Trading securities								
U.S. state, municipal and political subdivisions	17	—	—	—	—	—	17	—
CLO	22	(4)	—	—	11	(8)	21	(3)
RMBS	100	(2)	—	4	15	(16)	101	3
Equity securities	6	(1)	—	—	—	—	5	—
Mortgage loans	43	(1)	—	—	—	—	42	(1)
Funds withheld at interest – embedded derivative	279	24	—	—	—	—	303	—
Investments in related parties								
Fixed maturity securities								
AFS securities, CLO	—	—	—	10	—	—	10	—
Trading securities, CLO	123	3	—	(24)	19	(30)	91	2
Short-term investments	28	—	—	(20)	—	—	8	—
Reinsurance recoverable	1,782	1	—	—	—	—	1,783	—
Total Level 3 assets	$ 4,474	$ 30	$ 14	$ 215	$ 291	$ (190)	$ 4,834	$ 1
Liabilities								
Interest sensitive contract liabilities								
Embedded derivative	$ (6,207)	$ (344)	$ —	$ (101)	$ —	$ —	$ (6,652)	$ —
Universal life benefits	(954)	(3)	—	—	—	—	(957)	—
Future policy benefits								
AmerUs Closed Block	(1,621)	5	—	—	—	—	(1,616)	—
ILICO Closed Block and life benefits	(812)	1	—	—	—	—	(811)	—
Derivative liabilities	(6)	—	—	—	—	—	(6)	—
Total Level 3 liabilities	$ (9,600)	$ (341)	$ —	$ (101)	$ —	$ —	$ (10,042)	$ —

[1] *Related to instruments held at end of period.*

	Nine months ended September 30, 2018							
		Total realized and unrealized gains (losses)			Transfers			
(In millions)	Beginning Balance	Included in income	Included in OCI	Net purchases, issuances, sales and settlements	In	(Out)	Ending Balance	Total gains (losses) included in earnings[1]
Assets								
Fixed maturity securities								
AFS securities								
Corporate	$ 578	$ (3)	$ (12)	$ 385	$ 24	$ (8)	$ 964	$ —
CLO	64	2	—	264	10	—	340	—
ABS	1,461	6	(17)	67	161	(180)	1,498	—
CMBS	137	1	(2)	137	—	(91)	182	—
RMBS	301	3	(11)	(26)	—	(267)	—	—
Trading securities								
U.S. state, municipal and political subdivisions	17	—	—	—	—	—	17	—
CLO	17	(5)	—	—	—	(9)	3	(3)
ABS	77	(4)	—	—	—	(73)	—	(2)
RMBS	342	(57)	—	—	—	—	285	4
Equity securities	8	—	1	(7)	—	—	2	1
Mortgage loans	41	—	—	(4)	—	—	37	—
Investment funds	41	(4)	—	(7)	—	—	30	—
Funds withheld at interest – embedded derivative	312	(161)	—	—	—	—	151	—
Investments in related parties								
Fixed maturity securities								
AFS securities								
CLO	—	—	—	38	—	—	38	—
ABS	—	—	—	204	—	—	204	—
Trading securities								
CLO	105	(8)	—	(18)	18	(21)	76	(4)
ABS	—	—	—	—	151	—	151	—
Investment funds	—	(3)	—	108	—	—	105	—
Funds withheld at interest – embedded derivative	—	91	—	—	—	—	91	—
Short-term investments	—	—	—	10	—	—	10	—
Reinsurance recoverable	1,824	(145)	—	—	—	—	1,679	—
Total Level 3 assets	$ 5,325	$ (287)	$ (41)	$ 1,151	$ 364	$ (649)	$ 5,863	$ (4)
Liabilities								
Interest sensitive contract liabilities								
Embedded derivative	$ (7,436)	$ (140)	$ —	$ (1,080)	$ —	$ —	$ (8,656)	$ —
Universal life benefits	(1,005)	104	—	—	—	—	(901)	—
Future policy benefits								
AmerUs Closed Block	(1,625)	156	—	—	—	—	(1,469)	—
ILICO Closed Block and life benefits	(803)	39	—	—	—	—	(764)	—
Derivative liabilities	(5)	1	—	—	—	—	(4)	—
Total Level 3 liabilities	$ (10,874)	$ 160	$ —	$ (1,080)	$ —	$ —	$ (11,794)	$ —

[1] *Related to instruments held at end of period.*

	Nine months ended September 30, 2017							
		Total realized and unrealized gains (losses)			Transfers			
(In millions)	Beginning balance	Included in income	Included in OCI	Net purchases, issuances, sales and settlements	In	Out	Ending balance	Total gains (losses) included in earnings[1]
Assets								
Fixed maturity securities								
AFS Securities								
U.S. state, municipal and political subdivisions	$ 5	$ 17	$ (1)	$ (21)	$ —	$ —	$ —	$ —
Foreign governments	14	—	—	—	—	(14)	—	—
Corporate	370	10	10	107	23	(51)	469	—
CLO	158	1	9	40	53	(65)	196	—
ABS	1,160	11	18	237	6	(53)	1,379	—
CMBS	152	1	(4)	28	—	(90)	87	—
RMBS	17	1	1	12	300	(9)	322	—
Trading securities								
U.S. state, municipal and political subdivisions	17	—	—	—	—	—	17	—
CLO	43	(2)	—	(12)	—	(8)	21	1
RMBS	96	(11)	—	26	7	(17)	101	2
Equity Securities	5	(1)	1	—	—	—	5	—
Mortgage loans	44	(1)	—	(1)	—	—	42	(1)
Funds withheld at interest – embedded derivative	140	163	—	—	—	—	303	—
Investments in related parties								
Fixed maturity securities								
AFS Securities								
CLO	—	—	—	10	—	—	10	—
ABS	56	—	2	(5)	—	(53)	—	—
Trading securities, CLO	195	(3)	—	(52)	—	(49)	91	(1)
Short-term investments	—	—	—	8	—	—	8	—
Reinsurance recoverable	1,692	91	—	—	—	—	1,783	—
Total Level 3 assets	$ 4,164	$ 277	$ 36	$ 377	$ 389	$ (409)	$ 4,834	$ 1
Liabilities								
Interest sensitive contract liabilities								
Embedded derivative	$ (5,283)	$ (1,077)	$ —	$ (292)	$ —	$ —	$ (6,652)	$ —
Universal life benefits	(883)	(74)	—	—	—	—	(957)	—
Future policy benefits								
AmerUs Closed Block	(1,606)	(10)	—	—	—	—	(1,616)	—
ILICO Closed Block and life benefits	(794)	(17)	—	—	—	—	(811)	—
Derivative liabilities	(7)	1	—	—	—	—	(6)	1
Total Level 3 liabilities	$ (8,573)	$ (1,177)	$ —	$ (292)	$ —	$ —	$ (10,042)	$ 1

[1] *Related to instruments held at end of period.*

The following represents the gross components of purchases, issuances, sales and settlements, net, shown above:

	Three months ended September 30, 2018				
(In millions)	Purchases	Issuances	Sales	Settlements	Net purchases, issuances, sales and settlements
Assets					
Fixed maturity securities					
AFS securities					
Corporate	$ 156	$ —	$ (15)	$ (31)	$ 110
CLO	79	—	(8)	(19)	52
ABS	234	—	—	(56)	178
CMBS	1	—	—	(1)	—
Trading securities, CLO	—	—	(11)	—	(11)
Mortgage loans	—	—	—	(1)	(1)
Investments in related parties					
Fixed maturity securities					
AFS securities, ABS	158	—	—	—	158
Trading securities, ABS	—	—	—	(9)	(9)
Total Level 3 assets	$ 628	$ —	$ (34)	$ (117)	$ 477
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ —	$ (376)	$ —	$ 109	$ (267)
Total Level 3 liabilities	$ —	$ (376)	$ —	$ 109	$ (267)

	Three months ended September 30, 2017				
(In millions)	Purchases	Issuances	Sales	Settlements	Net purchases, issuances, sales and settlements
Assets					
Fixed maturity securities					
AFS securities					
Corporate	$ 27	$ —	$ (36)	$ (4)	$ (13)
CLO	72	—	—	(25)	47
ABS	275	—	—	(35)	240
CMBS	—	—	(18)	—	(18)
RMBS	—	—	—	(11)	(11)
Trading securities					
RMBS	4	—	—	—	4
Investments in related parties					
Fixed maturity securities					
AFS securities, CLO	10	—	—	—	10
Trading securities, CLO	—	—	(24)	—	(24)
Short-term investments	8	—	—	(28)	(20)
Total Level 3 assets	$ 396	$ —	$ (78)	$ (103)	$ 215
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ —	$ (142)	$ —	$ 41	$ (101)
Total Level 3 liabilities	$ —	$ (142)	$ —	$ 41	$ (101)

	Nine months ended September 30, 2018				
(In millions)	Purchases	Issuances	Sales	Settlements	Net purchases, issuances, sales and settlements
Assets					
Fixed maturity securities					
AFS securities					
Corporate	$ 460	$ —	$ (29)	$ (46)	$ 385
CLO	314	—	(8)	(42)	264
ABS	476	—	(21)	(388)	67
CMBS	138	—	—	(1)	137
RMBS	—	—	—	(26)	(26)
Trading securities					
CLO	7	—	(7)	—	—
Equity securities	1	—	(8)	—	(7)
Mortgage loans	—	—	—	(4)	(4)
Investment funds	—	—	—	(7)	(7)
Investments in related parties					
Fixed maturity securities					
AFS securities					
CLO	38	—	—	—	38
ABS	204	—	—	—	204
Trading securities, CLO	30	—	(48)	—	(18)
Investment funds	108	—	—	—	108
Short-term investments	10	—	—	—	10
Total Level 3 assets	$ 1,786	$ —	$ (121)	$ (514)	$ 1,151
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ —	$ (1,360)	$ —	$ 280	$ (1,080)
Total Level 3 liabilities	$ —	$ (1,360)	$ —	$ 280	$ (1,080)

	Nine months ended September 30, 2017				
(In millions)	Purchases	Issuances	Sales	Settlements	Net purchases, issuances, sales and settlements
Assets					
Fixed maturity securities					
AFS securities					
U.S. state, municipal and political subdivisions	$ —	$ —	$ —	$ (21)	$ (21)
Corporate	152	—	(37)	(8)	107
CLO	83	—	(2)	(41)	40
ABS	495	—	—	(258)	237
CMBS	29	—	—	(1)	28
RMBS	14	—	—	(2)	12
Trading securities					
CLO	4	—	(16)	—	(12)
RMBS	26	—	—	—	26
Mortgage loans	—	—	—	(1)	(1)
Investments in related parties					
Fixed maturity securities					
AFS securities					
CLO	10	—	—	—	10
ABS	5	—	—	(10)	(5)
Trading securities, CLO	—	—	(52)	—	(52)
Short-term investments	37	—	—	(29)	8
Total Level 3 assets	$ 855	$ —	$ (107)	$ (371)	$ 377
Liabilities					
Interest sensitive contract liabilities					
Embedded derivative	$ —	$ (412)	$ —	$ 120	$ (292)
Total Level 3 liabilities	$ —	$ (412)	$ —	$ 120	$ (292)

Significant Unobservable Inputs—Significant unobservable inputs occur when we could not obtain or corroborate the quantitative detail of the inputs. This applies to fixed maturity securities, equity securities, mortgage loans and certain derivatives, as well as embedded derivatives in liabilities. Additional significant unobservable inputs are described below.

Fixed maturity securities – For certain fixed maturity securities, internal models are used to calculate the fair value. We use a discounted cash flow approach. The discount rate is the significant unobservable input due to the determined credit spread being internally developed, illiquid, or as a result of other adjustments made to the base rate. The base rate represents a market comparable rate for securities with similar characteristics. As of September 30, 2018, discounts ranged from 6% to 9%, and as of December 31, 2017, discounts ranged from 2% to 6%. This excludes assets for which significant unobservable inputs are not developed internally, primarily consisting of broker quotes.

Interest sensitive contract liabilities – embedded derivative – Significant unobservable inputs we use in the fixed indexed annuities embedded derivative of the interest sensitive contract liabilities valuation include:

1. Non-performance risk – For contracts we issue, we use the credit spread, relative to the U.S. treasury curve, based on our public credit rating as of the valuation date. This represents our credit risk for use in the estimate of the fair value of embedded derivatives.
2. Option budget – We assume future hedge costs in the derivative's fair value estimate. The level of option budgets determines the future costs of the options and impacts future policyholder account value growth.
3. Policyholder behavior – We regularly review the lapse and withdrawal assumptions (surrender rate). These are based on our initial pricing assumptions updated for actual experience. Actual experience may be limited for recently issued products.

The following summarizes the unobservable inputs for the embedded derivatives of fixed indexed annuities:

	September 30, 2018				
(In millions, except for percentages)	Fair value	Valuation technique	Unobservable inputs	Input/range of inputs	Impact of an increase in the input on fair value
Interest sensitive contract liabilities – fixed indexed annuities embedded derivatives	$ 8,656	Option budget method	Non-performance risk	0.2% – 1.3%	Decrease
			Option budget	0.8% – 3.7%	Increase
			Surrender rate	4.4% – 7.6%	Decrease

	December 31, 2017				
(In millions, except for percentages)	Fair value	Valuation technique	Unobservable inputs	Input/range of inputs	Impact of an increase in the input on fair value
Interest sensitive contract liabilities – fixed indexed annuities embedded derivatives	$ 7,436	Option budget method	Non-performance risk	0.2% – 1.2%	Decrease
			Option budget	0.7% – 3.7%	Increase
			Surrender rate	1.5% – 19.4%	Decrease

Fair Value of Financial Instruments Not Carried at Fair Value—The following represents our financial instruments not carried at fair value on the condensed consolidated balance sheets:

	September 30, 2018					
(In millions)	Carrying Value	Fair Value	NAV[1]	Level 1	Level 2	Level 3
Financial Assets						
Mortgage loans	$ 8,945	$ 9,018	$ —	$ —	$ —	$ 9,018
Investment funds	565	565	565	—	—	—
Policy loans	512	512	—	—	512	—
Funds withheld at interest	7,690	7,690	—	—	—	7,690
Other investments	71	71	—	—	—	71
Investments in related parties						
Mortgage loans	389	382	—	—	—	382
Investment funds	1,896	1,896	1,896	—	—	—
Funds withheld at interest	13,872	13,872	—	—	—	13,872
Other investments	386	382	—	—	—	382
Total financial assets not carried at fair value	$ 34,326	$ 34,388	$ 2,461	$ —	$ 512	$ 31,415
Financial Liabilities						
Interest sensitive contract liabilities	$ 47,206	$ 44,174	$ —	$ —	$ —	$ 44,174
Long-term debt	991	936	—	—	936	—
Funds withheld liability	386	386	—	—	386	—
Total financial liabilities not carried at fair value	$ 48,583	$ 45,496	$ —	$ —	$ 1,322	$ 44,174

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

	December 31, 2017					
(In millions)	Carrying Value	Fair Value	NAV[1]	Level 1	Level 2	Level 3
Financial Assets						
Mortgage loans	$ 6,192	$ 6,342	$ —	$ —	$ —	$ 6,342
Investment funds	554	554	554	—	—	—
Policy loans	530	530	—	—	530	—
Funds withheld at interest	6,773	6,773	—	—	—	6,773
Other investments	133	133	—	—	58	75
Investments in related parties						
Investment funds	1,280	1,280	1,280	—	—	—
Other investments	238	259	—	—	—	259
Total financial assets not carried at fair value	$ 15,700	$ 15,871	$ 1,834	$ —	$ 588	$ 13,449
Financial Liabilities						
Interest sensitive contract liabilities	$ 31,586	$ 31,656	$ —	$ —	$ —	$ 31,656
Funds withheld liability	385	385	—	—	385	—
Total financial liabilities not carried at fair value	$ 31,971	$ 32,041	$ —	$ —	$ 385	$ 31,656

[1] *Investments measured at NAV as a practical expedient in determining fair value have not been classified in the fair value hierarchy.*

We estimate the fair value for financial instruments not carried at fair value using the same methods and assumptions as those we carry at fair value. The financial instruments presented above are reported at carrying value on the condensed consolidated balance sheets; however, in the case of policy loans, funds withheld at interest and liability, other investments and short-term debt, the carrying amount approximates fair value.

Investment in related parties – Other investments – The fair value of related party other investments is determined using a discounted cash flow model using discount rates for similar investments.

Interest sensitive contract liabilities – The carrying and fair value of interest sensitive contract liabilities above includes fixed indexed and traditional fixed annuities without mortality or morbidity risks, funding agreements and payout annuities without life contingencies. The embedded derivatives within fixed indexed annuities without mortality or morbidity risks are excluded, as they are carried at fair value. The valuation of these investment contracts is based on discounted cash flow methodologies using significant unobservable inputs. The estimated fair value is determined using current market risk-free interest rates, adding a spread to reflect our nonperformance risk and subtracting a risk margin to reflect uncertainty inherent in the projected cash flows.

Long-term debt – We obtain the fair value of long-term debt from commercial pricing services. These are classified as Level 2. The pricing services incorporate a variety of market observable information in their valuation techniques, including benchmark yields, trading activity, credit quality, issuer spreads, bids, offers and other reference data.

6. Deferred Acquisition Costs, Deferred Sales Inducements and Value of Business Acquired

The following represents a rollforward of deferred acquisition costs (DAC), deferred sales inducements (DSI) and value of business acquired (VOBA):

(In millions)	DAC	DSI	VOBA	Total
Balance at December 31, 2017	$ 1,354	$ 520	$ 1,056	$ 2,930
Additions	1,791	197	—	1,988
Unlocking	21	7	54	82
Amortization	(151)	(73)	(135)	(359)
Impact of unrealized investment (gains) losses	126	48	157	331
Balance at September 30, 2018	$ 3,141	$ 699	$ 1,132	$ 4,972

(In millions)	DAC	DSI	VOBA	Total
Balance at December 31, 2016	$ 1,142	$ 462	$ 1,336	$ 2,940
Additions	371	121	—	492
Unlocking	13	4	(1)	16
Amortization	(142)	(46)	(121)	(309)
Impact of unrealized investment (gains) losses	(90)	(36)	(110)	(236)
Balance at September 30, 2017	$ 1,294	$ 505	$ 1,104	$ 2,903

7. Reinsurance

Reinsurance transactions—On June 1, 2018, we entered into coinsurance and modco agreements with Voya Insurance and Annuity Company (VIAC) to reinsure a block of fixed and fixed indexed annuities. VIAC is a related party pursuant to GAAP due to our minority equity investment in its holding company's parent, VA Capital Company LLC (VA Capital), as discussed further in *Note 12 – Related Parties*. Additionally, we entered into modco agreements with ReliaStar Life Insurance Company (RLI), a subsidiary of Voya Financial, Inc. (Voya), to reinsure a block of fixed and fixed indexed annuities. The following summarizes these reinsurance transactions (collectively, Voya reinsurance transactions):

	VIAC		RLI	
(In millions)	Coinsurance	Modco	Modco	Total
Liabilities assumed	$ 3,667	$ 14,911	$ 457	$ 19,035
Less: Assets received	3,478	14,332	445	18,255
Ceding commission (paid) received	(86)	(320)	12	(394)
Net cost of reinsurance	$ 275	$ 899	$ —	$ 1,174
DAC	$ 293	$ 999	$ 4	$ 1,296
Unearned revenue reserve[1]	(8)	(57)	(4)	(69)
Deferred profit liability[2]	(10)	(43)	—	(53)
Net cost of reinsurance	$ 275	$ 899	$ —	$ 1,174

[1] *Included within interest sensitive contract liabilities on the condensed consolidated balance sheets.*

[2] *Included within future policy benefits on the condensed consolidated balance sheets.*

DAC and unearned revenue reserve balances are amortized over the life of the reinsurance agreements on a basis consistent with our DAC amortization policy. The deferred profit liability balance is amortized over the life of the reinsurance agreement on a constant relationship to the benefit reserves.

The following summarizes the effect of reinsurance on premiums and future policy and other policy benefits on the consolidated statements of income:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Premiums				
Direct	$ 527	$ 109	$ 959	$ 637
Reinsurance assumed	46	5	702	17
Reinsurance ceded	(42)	(42)	(126)	(151)
Total premiums	$ 531	$ 72	$ 1,535	$ 503
Future policy and other policy benefits				
Direct	$ 1,047	$ 350	$ 1,783	$ 1,349
Reinsurance assumed	59	7	723	30
Reinsurance ceded	(186)	(98)	(328)	(328)
Total future policy and other policy benefits	$ 920	$ 259	$ 2,178	$ 1,051

Global Atlantic ceded reinsurance transactions—During the quarter ended September 30, 2018, we were notified by Global Atlantic of corrections they made to balances previously provided to us related to the novated business ceded to Global Atlantic. As a result, we have recorded an out-of-period adjustment, which increased policy loans $12 million, reinsurance recoverable $354 million, interest sensitive contract liabilities $292 million, and future policy benefits $74 million on the condensed consolidated balance sheet. There was no impact to the condensed consolidated statements of income, comprehensive income, equity or cash flows. We evaluated this out-of-period adjustment and determined it was not material to the condensed consolidated financial statements as of September 30, 2018 or December 31, 2017, or any other previously reported period.

8. Debt

Senior Notes—In the first quarter of 2018, AHL issued $1 billion of unsecured senior notes due in January 2028. The senior notes have a 4.125% coupon rate, payable semi-annually. The senior notes are callable at any time prior to October 12, 2027 by AHL, at a price equal to the greater of (1) 100% of the principal and any accrued and unpaid interest and (2) an amount equal to the sum of the present values of remaining scheduled payments, discounted from the scheduled payment date to the redemption date at the Treasury Rate (as defined in the prospectus supplement relating to the senior notes, dated January 9, 2018) plus 25 basis points, and any accrued and unpaid interest. Interest expense on long-term debt was $10 million and $30 million for the three and nine months ended September 30, 2018, respectively.

Short-term Debt—In the second quarter of 2018, we borrowed $183 million from the Federal Home Loan Bank (FHLB) of Des Moines through their variable rate short-term federal funds program. The borrowing carried an interest rate of 2.16% and was repaid in the third quarter of 2018.

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9. Earnings Per Share

The following represents our basic and diluted earnings per share (EPS) calculations:

	Three months ended September 30, 2018					
(In millions, except share and per share data)	Class A	Class B	Class M-1	Class M-2	Class M-3	Class M-4
Net income – basic and diluted	$ 534	$ 83	$ 11	$ 3	$ 3	$ 6
Basic weighted average shares outstanding	164,527,680	25,483,107	3,386,963	841,011	1,001,110	2,070,590
Dilutive effect of stock compensation plans	529,382	—	—	—	—	628,718
Diluted weighted average shares outstanding	165,057,062	25,483,107	3,386,963	841,011	1,001,110	2,699,308
Earnings per share[1]						
Basic	$ 3.24	$ 3.24	$ 3.24	$ 3.24	$ 3.24	$ 3.24
Diluted	$ 3.23	$ 3.24	$ 3.24	$ 3.24	$ 3.24	$ 2.49

[1] *Calculated using whole figures.*

	Three months ended September 30, 2017					
(In millions, except share and per share data)	Class A	Class B	Class M-1	Class M-2	Class M-3	Class M-4
Net income – basic and diluted	$ 167	$ 98	$ 5	$ 1	$ 1	$ 2
Basic weighted average shares outstanding	119,519,911	69,862,355	3,388,890	857,831	928,870	1,776,455
Dilutive effect of stock compensation plans	372,358	—	—	7,191	289,284	1,362,388
Diluted weighted average shares outstanding	119,892,269	69,862,355	3,388,890	865,022	1,218,154	3,138,843
Earnings per share[1]						
Basic	$ 1.40	$ 1.40	$ 1.40	$ 1.40	$ 1.40	$ 1.40
Diluted	$ 1.39	$ 1.40	$ 1.40	$ 1.39	$ 1.07	$ 0.79

[1] *Calculated using whole figures.*

	Nine months ended September 30, 2018					
(In millions, except share and per share data)	Class A	Class B	Class M-1	Class M-2	Class M-3	Class M-4
Net income – basic and diluted	$ 946	$ 182	$ 20	$ 5	$ 6	$ 13
Basic weighted average shares outstanding	159,284,577	30,630,567	3,388,240	842,157	1,017,755	2,085,833
Dilutive effect of stock compensation plans	509,261	—	—	5,095	6,858	717,426
Diluted weighted average shares outstanding	159,793,838	30,630,567	3,388,240	847,252	1,024,613	2,803,259
Earnings per share[1]						
Basic	$ 5.94	$ 5.94	$ 5.94	$ 5.94	$ 5.94	$ 5.94
Diluted	$ 5.92	$ 5.94	$ 5.94	$ 5.90	$ 5.90	$ 4.42

[1] *Calculated using whole figures.*

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	Nine months ended September 30, 2017					
(In millions, except share and per share data)	Class A	Class B	Class M-1	Class M-2	Class M-3	Class M-4
Net income – basic	$ 513	$ 443	$ 17	$ 3	$ 3	$ 5
Effect of stock compensation plans on allocated net income	11	—	—	—	—	—
Net income – diluted	$ 524	$ 443	$ 17	$ 3	$ 3	$ 5
Basic weighted average shares outstanding	101,506,304	87,703,973	3,416,703	604,722	559,987	1,078,282
Dilutive effect of stock compensation plans	3,297,329	—	—	331,206	686,268	1,768,169
Diluted weighted average shares outstanding	104,803,633	87,703,973	3,416,703	935,928	1,246,255	2,846,451
Earnings per share[1]						
Basic	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.05
Diluted	$ 5.00	$ 5.05	$ 5.05	$ 3.26	$ 2.27	$ 1.91

[1] *Calculated using whole figures.*

We use the two-class method for allocating net income to each class of our common stock. Our Class M shares did not become eligible to participate in dividends until a return of investment (ROI) condition had been met for each class. Once eligible, each class of our common stock has equal dividend rights. The ROI condition was met for Class M-2 on March 28, 2017, and for Class M-3 and Class M-4 on April 20, 2017. For purposes of calculating basic weighted average shares outstanding and the allocation of basic income, shares are deemed to be participating in earnings for only the portion of the period after the condition is met. For purposes of calculating diluted weighted average shares outstanding, shares are deemed dilutive as of the beginning of the period.

Dilutive shares are calculated using the treasury stock method. For Class A shares, this method takes into account shares that can be settled into Class A shares, net of a conversion price. The diluted EPS calculations for Class A shares excluded the following shares, restricted stock units (RSUs) and options:

	Three months ended September 30,		Nine months ended September 30,	
	2018	2017	2018	2017
Antidilutive shares, RSUs and options excluded from diluted EPS calculation	34,908,644	79,931,099	34,908,644	73,016,963
Shares, RSUs and options excluded from diluted EPS calculation as a performance condition had not been met	176,935	187,046	176,935	1,425,926
Total shares, RSUs and options excluded from diluted EPS calculation	35,085,579	80,118,145	35,085,579	74,442,889

Note: Shares, RSUs and options are as of period end.

10. Accumulated Other Comprehensive Income

The following is a detail of AOCI and changes in AOCI. Prior period balances include equity securities that were classified as AFS securities prior to the adoption of ASU 2016-01.

(In millions)	September 30, 2018	December 31, 2017
AFS securities	$ 148	$ 2,577
DAC, DSI, VOBA, future policy benefits and dividends payable to policyholders adjustments on AFS securities	(39)	(744)
Noncredit component of OTTI losses on AFS securities	(17)	(13)
Hedging instruments	(43)	(95)
Pension adjustments	(2)	(5)
Foreign currency translation adjustments	(2)	8
Accumulated other comprehensive income, before taxes	45	1,728
Deferred income taxes	(2)	(313)
Accumulated other comprehensive income	$ 43	$ 1,415

Changes in AOCI are presented below:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Unrealized investment gains (losses) on AFS securities				
Unrealized investment gains (losses) on AFS securities	$ (174)	$ 249	$ (2,345)	$ 1,500
Change in DAC, DSI, VOBA, future policy benefits and dividends payable to policyholders adjustment	77	(61)	701	(284)
Less: Reclassification adjustment for gains (losses) realized in net income[1]	6	17	36	44
Less: Income tax expense (benefit)	(18)	55	(319)	347
Net unrealized investment gains (losses) on AFS securities	(85)	116	(1,361)	825
Noncredit component of OTTI losses on AFS securities				
Noncredit component of OTTI losses on AFS securities	(4)	(7)	(4)	(5)
Less: Reclassification adjustment for losses realized in net income[1]	—	(9)	—	(7)
Less: Income tax expense (benefit)	(1)	1	(1)	1
Net noncredit component of OTTI losses on AFS securities	(3)	1	(3)	1
Unrealized gains (losses) on hedging instruments				
Unrealized gains (losses) on hedging instruments	7	(31)	52	(69)
Less: Income tax expense (benefit)	2	(11)	11	(24)
Net unrealized gains (losses) on hedging instruments	5	(20)	41	(45)
Pension adjustments	—	1	3	—
Foreign currency translation adjustments	—	4	(10)	14
Change in AOCI from other comprehensive income (loss)	(83)	102	(1,330)	795
Adoption of ASU 2016-01	—	—	(42)	—
Change in AOCI	$ (83)	$ 102	$ (1,372)	$ 795

[1] *Recognized in investment related gains (losses) on the condensed consolidated statements of income.*

11. Income Taxes

Our effective tax rates were 9% and 7% for the three months ended September 30, 2018 and 2017, respectively, and 14% and 5% for the nine months ended September 30, 2018 and 2017, respectively. Our effective tax rates may vary period to period depending upon the relationship of income and loss subject to tax compared to consolidated income and loss before income taxes. With the enactment of Public Law no. 115-97, an Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018 (Tax Act), the U.S. statutory tax rate declined to 21% from 35%; however, the Base Erosion and Anti-Abuse Tax (BEAT) was established, which may subject payments to our non-U.S. reinsurance subsidiaries to a tax of 5%, which would increase to 10% in 2019. The income tax expense for the three and nine months ended September 30, 2018 reflects the impact of the restructuring of our internal modco arrangements and implementing additional reinsurance arrangements common in the insurance industry.

The Internal Revenue Service is currently auditing the 2013 consolidated tax return filed by Athene USA, and is also conducting a limited scope audit of the 2015 consolidated tax return filed by Athene Annuity & Life Assurance Company (AADE). No material proposed adjustments have been issued with respect to either exam. See discussion of ongoing tax examinations relating to Aviva USA Corporation (Aviva USA) in *Note 13 – Commitments and Contingencies*.

Under current Bermuda law, we are not required to pay any taxes in Bermuda on either income or capital gains. We have received an undertaking from the Bermuda Minister of Finance that, in the event of any such taxes being imposed, we will be exempted from taxation until the year 2035.

12. Related Parties

Athene Asset Management

Investment related expenses – Substantially all of our investments are managed by Athene Asset Management LLC (AAM), a subsidiary of AGM. AAM provides direct investment management, asset allocation, mergers and acquisition asset diligence and certain operational support services for our investment portfolio, including investment compliance, tax, legal and risk management support. As of September 30, 2018, AAM directly managed $81,817 million of our investment portfolio assets, of which 85% are designated one or two (the two highest designations) by the National Association of Insurance Commissioners (NAIC).

For the services it renders, AAM earns a fee on all assets managed in accounts owned by or related to us, including sub-advised assets, subject to certain limited exceptions. Additionally, AAM recharges the sub-advisory fees it incurs with respect to our sub-advised assets to us. Historically, AAM generally earned an annual fee of 0.40% of assets under management. In the second quarter of 2017, following shareholder approval of an amendment to our bye-laws, we entered into the Fifth Amended and Restated Fee Agreement (Revised Fee Agreement), retroactive to January 1, 2017. The Revised Fee Agreement amended certain fee arrangements we previously had in place with AAM to provide for, among other things, an annual fee of 0.30% (reduced from 0.40%) on all assets that Apollo manages in accounts owned by us in the U.S. and Bermuda or in accounts supporting reinsurance ceded to our U.S. and Bermuda subsidiaries by third-party insurers (North American Accounts) in excess of $65,846 million (the level of assets in the North American Accounts as of December 31, 2016). The fee to be paid by us to AAM on the first $65,846 million of assets in the North American Accounts remains 0.40% per year, subject to certain discounts and exceptions.

For certain assets which require specialized sourcing and underwriting capabilities, AAM has chosen to mandate sub-advisors rather than building out in-house capabilities. AAM has entered into Master Sub-Advisory Agreements (MSAAs) with certain Apollo affiliates to sub-advise AAM with respect to a portion of our assets, with the fees recharged to us, in addition to the gross fee paid to AAM as described above. The MSAAs cover services rendered by Apollo-affiliated sub-advisors relating to the following investments:

(In millions, except for percentages)	September 30, 2018	December 31, 2017
Fixed maturity securities		
AFS securities		
Foreign governments	$ 173	$ 152
Corporate	3,409	2,934
CLO	5,636	5,166
ABS	652	681
CMBS	874	872
Trading securities	103	121
Mortgage loans	3,202	2,232
Investment funds	28	26
Funds withheld at interest	2,720	1,737
Other investments	72	75
Total assets sub-advised by Apollo affiliates	$ 16,869	$ 13,996
Percent of assets sub-advised by Apollo affiliates to total AAM-managed assets	17%	18%

During the second quarter of 2017, AAM and certain other Apollo affiliates entered into addendums to the MSAAs currently in effect, pursuant to which, with limited exceptions, Apollo will earn 0.40% per year on all assets in the North American Accounts explicitly sub-advised by Apollo up to $10,000 million, 0.35% per year on all assets in such accounts explicitly sub-advised by Apollo in excess of $10,000 million up to $12,441 million (the level of fee-paying sub-advised assets in the North American Accounts at December 31, 2016), 0.40% per year on all assets in such accounts explicitly sub-advised by Apollo in excess of $12,441 million up to $16,000 million, and 0.35% per year on all assets in such accounts explicitly sub-advised by Apollo in excess of $16,000 million. The addendums were retroactive to January 1, 2017.

The following summarizes the asset management fees and sub-advisory fees we have incurred related to AAM and other Apollo affiliates:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Asset management fees	$ 73	$ 67	$ 215	$ 193
Sub-advisory fees	15	14	42	42

The management and sub-advisory fees are included within net investment income on the condensed consolidated statements of income. As of September 30, 2018 and December 31, 2017, the management fees payable was $39 million and $28 million, respectively, and the sub-advisory fees payable was $18 million and $13 million, respectively. Both the management and sub-advisory fees payables are included in other liabilities on the condensed consolidated balance sheets.

The investment management agreements with AAM have no stated term and any party can terminate upon notice. However, our bye-laws provide that we will not exercise our termination rights under the agreements until any annual anniversary of October 31 (each such date, an IMA (Investment Management Agreement) Termination Election Date) and any termination thereon requires the approval of two-thirds of our Independent Directors (as defined in the bye-laws) and prior written notice thereof to Apollo of at least 30 days. If the Independent Directors make such election and such notice is timely delivered, the termination will be effective on the second anniversary of the applicable IMA Termination Election Date (an IMA Termination Effective Date). Notwithstanding the foregoing, (1) the Independent Directors may only elect to terminate an investment management agreement or advisory agreement on an IMA Termination Election Date if two-thirds of the Independent Directors determine in their sole discretion acting in good faith that either (i) there has been unsatisfactory long-term performance materially detrimental to us by Apollo or (ii) the fees being charged by Apollo are unfair and excessive compared to a comparable asset manager (provided, that in either case such Independent Directors must deliver notice of any such determination to Apollo and Apollo shall have until the applicable IMA Termination Effective Date to address such concerns, and provided, further, that in the case of such a determination that the fees being charged by Apollo are unfair and excessive, Apollo has the right to lower its fees to match the fees of such comparable asset manager) and (2) upon the determination by two-thirds of the Independent Directors, we may also terminate an investment management agreement or advisory agreement with Apollo as a result of either (i) a material violation of law relating to Apollo's advisory business, or (ii) Apollo's gross negligence, willful misconduct or reckless disregard of its obligations under the relevant agreement, and in either case (i) or (ii), the delivery at least 30 days' prior written notice to Apollo of such termination and such termination will be effective at the end of such 30-day period.

We have a management investment committee, which includes members of our senior management and reports to the risk committee of our board of directors. The committee focuses on strategic decisions involving our investment portfolio, such as approving investment limits, new asset classes and our allocation strategy, reviewing large asset transactions, as well as monitoring our credit risk, and the management of our assets and liabilities.

A significant voting interest in the Company is held by shareholders who are members of the Apollo Group, as defined in our bye-laws. Also, James Belardi, our Chief Executive Officer, is also an employee of AAM, receives substantial remuneration from acting as Chief Executive Officer of AAM, and owns a 5% profits interest in AAM. Additionally, five of the thirteen members of our board of directors are employees of or consultants to Apollo (including Mr. Belardi). In order to protect against potential conflicts of interest resulting from transactions into which we have entered and will continue to enter into with the Apollo Group, our bye-laws require us to maintain a conflicts committee comprised solely of three of our directors who are not officers or employees of any member of the Apollo Group. The conflicts committee reviews and approves material transactions between us and the Apollo Group, subject to certain exceptions.

Other related party transactions

A-A Mortgage – We have an equity method investment in A-A Mortgage, which has an investment in AmeriHome Mortgage Company, LLC (AmeriHome). We have a loan purchase agreement with AmeriHome. The agreement allows us to purchase residential mortgage loans which AmeriHome has purchased from correspondent sellers and pooled for sale in the secondary market. AmeriHome retains the servicing rights to the sold loans. We purchased $511 million and $20 million of residential mortgage loans under this agreement during the three months ended September 30, 2018 and 2017, respectively. We purchased $722 million and $21 million of residential mortgage loans under this agreement during the nine months ended September 30, 2018 and 2017, respectively. Additionally, we have loans due from A-A Mortgage affiliates in the principal amount of $10 million and $52 million as of September 30, 2018 and December 31, 2017, respectively, and these are included in related party short-term investments on the condensed consolidated balance sheets. We also have commitments to make additional equity investments in A-A Mortgage of $125 million as of September 30, 2018.

Athora – On January 1, 2018, in order to align our interests with those of Athora, in connection with the Closing, we entered into a cooperation agreement with Athora, pursuant to which, among other things, (1) we will have the right to reinsure approximately 20% of the spread business written or reinsured by any insurance or reinsurance company owned or acquired by Athora, (2) Athora's insurance subsidiaries will be required to purchase certain funding agreements and/or other spread instruments issued by our insurance subsidiaries, (3) we will provide Athora with a right of first refusal to pursue acquisition and reinsurance transactions in Europe (other than the United Kingdom) and (4) Athora will provide us and our subsidiaries with a right of first refusal to pursue acquisition and reinsurance transactions in North America and the United Kingdom. Additionally, as of September 30, 2018, we had $169 million of funding agreements outstanding to Athora, which were issued to Athora prior to Closing.

VA Capital and Venerable Holdings, Inc. (Venerable) – In connection with the Voya reinsurance transactions, we made a $75 million minority equity investment in VA Capital, which is included in investments in related parties – investment funds on the condensed consolidated balance sheets and accounted for as an equity method investment. VA Capital is owned by a consortium of investors, led by affiliates of AGM, Crestview Partners and Reverence Capital Partners, and is the holding company of Venerable. Additionally, we provided Venerable with a $150 million, 15-year term loan, which is held at amortized cost and included in investment in related parties – other investments on the condensed consolidated balance sheets. It has a stated interest rate of 6.257%, which represents a below-market interest rate and management considered such rate as part of its evaluation and pricing of the Voya reinsurance transactions. Venerable is the holding company of VIAC.

Strategic Partnership – On October 24, 2018, we entered into an agreement pursuant to which we may invest up to $2.5 billion over three years in funds managed by Apollo entities (the "Strategic Partnership"). This arrangement is intended to permit us to invest across the Apollo alternatives platform into credit-oriented, strategic and other alternative investments in a manner and size that is consistent with our existing investment strategy. Fees for such investments payable by us to Apollo would be more favorable to us than market rates, and consistent with our existing alternative investments, investments made under the Strategic Partnership require approval of AAM and remain subject to our existing governance processes, including approval by our conflicts committee where applicable.

13. Commitments and Contingencies

Contingent Commitments—We had commitments to make investments, primarily capital contributions to investment funds and inclusive of related party commitments, of $3,123 million and $2,358 million as of September 30, 2018 and December 31, 2017, respectively. We expect most of our current commitments will be invested over the next five years; however, these commitments could become due any time upon counterparty request.

Funding Agreements—We are a member of the FHLB and, through membership, we have issued funding agreements to the FHLB in exchange for cash advances. As of September 30, 2018 and December 31, 2017, we had $701 million and $573 million, respectively, of funding agreements outstanding with the FHLB. We are required to provide collateral in excess of the funding agreement amounts outstanding, considering any discounts to the securities posted and prepayment penalties.

We have a funding agreement backed notes (FABN) program, which allows Athene Global Funding, a special-purpose, unaffiliated statutory trust to offer up to $10 billion of its senior secured medium-term notes. Athene Global Funding uses the net proceeds from each sale to purchase one or more funding agreements from us. Funding agreements outstanding under this program had a carrying value of $2,996 million as of September 30, 2018 and December 31, 2017.

Pledged Assets and Funds in Trust (Restricted Assets)—The total restricted assets included on the condensed consolidated balance sheets are as follows:

(In millions)	September 30, 2018	December 31, 2017
Fixed maturity securities		
AFS securities	$ 4,929	$ 1,572
Trading securities	51	—
Equity securities	2	36
Mortgage loans	1,106	914
Investment funds	31	20
Short-term investments	68	10
Other investments	38	—
Restricted cash	218	105
Total restricted assets	$ 6,443	$ 2,657

The restricted assets are primarily related to reinsurance trusts established in accordance with coinsurance agreements, and the FHLB funding agreements described above.

Litigation, Claims and Assessments

Griffiths Matter – On July 27, 2015, John Griffiths, on behalf of himself and others similarly situated, filed a putative class action complaint against us in the United States District Court for the District of Massachusetts. An amended complaint was filed on December 18, 2015. The complaint asserts claims against AHL, Athene Annuity and Life Company (AAIA), and Athene London Assignment Corporation (Athene London), in addition to an Aviva defendant. AHL is a named defendant due to its purchase of Aviva USA, and AAIA and Athene London are named as successors to Aviva Life Insurance Company and Aviva London Assignment Corporation, respectively. The complaint alleges a putative class of all persons who are the beneficial owners of assets which were used to purchase structured settlement annuities that Aviva Life Insurance Company, Aviva London Assignment Corporation, and Aviva International Insurance Limited (collectively, the Aviva Entities) or their predecessors, as applicable, delivered to purchasers on or after April 1, 2003 that were backed by a capital maintenance agreement issued by Aviva International Insurance Limited or its predecessor (the CMA). The complaint alleges that the Aviva Entities sold structured settlement annuities to the public on the basis that such products were backed by the CMA, which was alleged to be a source of great financial strength. The complaint further alleges that the Aviva Entities used the CMA to enhance the sales volume and raise the price of the annuities. The complaint claims that, as a result of Aviva USA's sale to AHL, the CMA terminated. According to the complaint, no notice of this termination was provided to the owners of the structured settlement annuities. The complaint alleges that the termination of the CMA gave rise to claims for breach of contract, breach of fiduciary duty, promissory estoppel, and unjust enrichment. AHL and plaintiff agreed to a term sheet settlement on a class-wide basis. On October 23, 2018, the court granted final approval of the settlement. Terms of the settlement include: (1) AHL entering into a capital maintenance agreement with Athene London requiring AHL to provide capital to Athene London upon a missed structured settlement payment that is not timely cured and (2) AHL paying a monetary amount that is immaterial to us.

Internal Revenue Service (IRS) Matters – The IRS completed its examinations of the 2006 through 2010 Aviva USA tax years with Aviva USA agreeing to all proposed adjustments with two exceptions: (1) AAIA's treatment of call options used to hedge fixed indexed annuity (FIA) liabilities for the tax years 2008–2010 and (2) the disallowance of offsetting tax deductions taken by AAIA and taxable income reported by the non-life subgroup with respect to unpaid independent marketing organization commissions. The first adjustment to which Aviva USA did not agree would disallow deductions of $191 million, $154 million and $76 million for 2008, 2009 and 2010, respectively. The second adjustment to which Aviva USA did not agree would increase non-life net operating losses and decrease AAIA net operating losses by $16 million in each of 2009 and 2010. Taxes, penalties and interest with respect to these two issues for the years under audit are subject to indemnification by Aviva plc under the Stock Purchase Agreement (SPA) between Aviva plc and AHL, dated December 21, 2012 assuming the SPA requirements are satisfied. Athene USA was unable to negotiate a favorable settlement of this issue with the IRS, and is contesting the adjustment in federal court. If the IRS position is upheld in federal court, Athene USA expects that it would owe tax of $120 million, plus interest, for tax years ending on or before October 2, 2013, which are subject to indemnification by Aviva plc as described above.

The IRS also recently completed its examination of the 2011 through 2012 Aviva USA tax years, proposing adjustments that would increase taxable income by approximately $16 million in the aggregate for these two tax years. Athene USA agreed to all adjustments that were proposed with respect to those tax years except for adjustments relating to the same two issues that were not agreed to during the prior examination as discussed above. The first adjustment to which Athene USA did not agree would disallow deductions of $16 million in 2011 and increase deductions by $12 million in 2012. The second adjustment to which Athene USA did not agree would increase non-life net operating losses and decrease AAIA net operating losses by $15 million in 2011 and $12 million in 2012. Taxes, penalties and interest with respect to these two tax years are subject to indemnification by Aviva plc under the SPA, assuming the SPA requirements are satisfied. The treatment of FIA hedges is a recurring issue as to the timing of the related deductions and could affect the current income tax incurred in periods after October 2, 2013, which are not subject to indemnification by Aviva plc. Given that the disallowance of a deduction in one period results in an increased deduction in a future period, we do not expect that there will be any material impact to our financial condition resulting from this issue.

Corporate-owned Life Insurance (COLI) Matter – In 2000 and 2001, two insurance companies which were subsequently merged into AAIA purchased from American General Life Insurance Company (American General) broad based variable COLI policies that, as of September 30, 2018, had an asset value of $366 million, and is included in other assets on the condensed consolidated balance sheets. In January 2012, the COLI policy administrator delivered to AAIA a supplement to the existing COLI policies and advised that American General and ZC Resource Investment Trust (ZC Trust) had unilaterally implemented changes set forth in the supplement that if effective, would: (1) potentially negatively impact the crediting rate for the policies and (2) change the exit and surrender protocols set forth in the policies. In March 2013, AAIA filed suit against American General, ZC Trust, and ZC Resource LLC in Chancery Court in Delaware, seeking, among other relief, a declaration that the changes set forth in the supplement were ineffectual and in breach of the parties' agreement. The parties filed cross motions for judgment as a matter of law, and the court granted defendants' motion and dismissed without prejudice on ripeness grounds. The issue that negatively impacts the crediting rate for one of the COLI policies has subsequently been triggered and on April 3, 2018, we filed suit against the same defendants in Chancery Court in Delaware seeking substantially similar relief, which the defendants have moved to dismiss. The Court set the hearing for February 13, 2019. If the supplement is ultimately deemed to be effective, the purported changes to the policies could impair AAIA's ability to access the value of guarantees associated with the policies. The value of the guarantees included within the asset value reflected above is $176 million as of September 30, 2018.

Holzer Matter – On September 12, 2016, Jack Holzer and Mary Bruesh-Holzer filed suit in Jackson County, Missouri against several defendants, including AADE, as successor-in-interest to Business Men's Assurance Company of America. Mr. Holzer allegedly sustained injuries due to asbestos exposure from 1966–1973 while working in an office building in Kansas City, Missouri, then owned by Business Men's Assurance Company of America. Plaintiffs asserted strict liability and negligence claims against AADE. On February 26, 2018, an agreement was reached that resulted in the settlement of this matter. The settlement had no impact on our financial condition, results of operations or cash flows.

Regulatory Matter – Our U.S. insurance subsidiaries have experienced increased service and administration complaints related to the conversion and administration of the block of life insurance business acquired in connection with our acquisition of Aviva USA and reinsured to affiliates of Global Atlantic. The life insurance policies included in this block have been and are currently being administered by AllianceOne Inc. (AllianceOne), a subsidiary of DXC Technology Company, which was retained by such Global Atlantic affiliates to provide services on such policies. AllianceOne also administers certain annuity policies that were on Aviva USA's legacy policy administration systems that were also converted in connection with the acquisition of Aviva USA and have experienced similar service and administration issues.

As a result of the difficulties experienced with respect to the administration of such policies, we have received notifications from several state regulators, including but not limited to the New York State Department of Financial Services (NYSDFS), the California Department of Insurance (CDI) and the Texas Department of Insurance, indicating, in each case, that the respective regulator planned to undertake a market conduct examination or enforcement proceeding of the applicable U.S. insurance subsidiary relating to the treatment of policyholders subject to our reinsurance agreements with affiliates of Global Atlantic and the conversion of such annuity policies, including the administration of such blocks by AllianceOne. On June 28, 2018 we entered into a consent order with the NYSDFS resolving that matter in a manner that, when considering the indemnification received from affiliates of Global Atlantic, did not have a material impact on our financial condition, results of operations or cash flows.

In addition to the foregoing, we have received inquiries, and expect to continue to receive inquiries, from other regulatory authorities regarding the conversion matter. In addition to the examinations and proceedings initiated to date, it is possible that other regulators may pursue similar formal examinations, inquiries or enforcement proceedings and that any examinations, inquiries and/or enforcement proceedings may result in fines, administrative penalties and payments to policyholders. While we do not expect the amount of any such fines, penalties or payments arising from these matters to be material to our financial condition, results of operations or cash flows, it is possible that such amounts could be material.

Pursuant to the terms of the reinsurance agreements between us and the relevant affiliates of Global Atlantic, the applicable affiliates of Global Atlantic have financial responsibility for the ceded life block and are subject to significant administrative service requirements, including compliance with applicable law. The agreements also provide for indemnification to us, including for administration issues.

Caldera Matters – On May 3, 2018, AHL filed a writ commencing litigation in the Supreme Court of Bermuda against a former officer of AHL, a former director of AHL (who is also considered a former officer pursuant to Bermuda law), and Caldera Holdings, Ltd. (Caldera). AHL alleges in the writ, among other things, that the defendants breached various duties owed to AHL under Bermuda law by using AHL's confidential information in their attempted acquisition of a company referred to in the litigation as Company A. AHL is seeking injunctive relief and damages.

On May 3, 2018, following AHL's filing of the writ in Bermuda described above, Caldera, Caldera Life Reinsurance Company, and Caldera Shareholder, L.P., commenced an action in the Supreme Court of the State of New York, County of New York, by filing a Summons with Notice against AHL, Apollo, certain affiliates of Apollo and Leon Black, a founder of Apollo. On July 12, 2018, plaintiffs filed a complaint alleging claims for tortious interference with prospective business relations, defamation, and unfair competition related to plaintiffs' attempt to purchase Company A and seeking alleged damages of "no less than $1.5 billion." AHL intends to, among other things, move to dismiss the complaint against it. We believe we have meritorious defenses to the claims and intend to vigorously defend the litigation. In light of the inherent uncertainties involved in this matter, reasonably possible losses, if any, cannot be estimated at this time.

14. Segment Information

We operate our core business strategies out of one reportable segment, Retirement Services. In addition to Retirement Services, we report certain other operations in Corporate and Other.

Retirement Services—Retirement Services is comprised of our United States and Bermuda operations, which issue and reinsure retirement savings products and institutional products. Retirement Services has retail operations, which provide annuity retirement solutions to our policyholders. Retirement Services also has reinsurance operations, which reinsure multi-year guaranteed annuities, fixed indexed annuities, traditional one-year guarantee fixed deferred annuities, immediate annuities and institutional products from our reinsurance partners. In addition, our institutional operations, including funding agreements and pension risk transfer (PRT) obligations, are included in our Retirement Services segment.

Corporate and Other—Corporate and Other includes certain other operations related to our corporate activities, including corporate allocated expenses, merger and acquisition costs, debt costs, certain integration and restructuring costs, certain stock-based compensation and intersegment eliminations. In Corporate and Other, we also hold capital in excess of the level of capital we hold in Retirement Services to support our operating strategy. Prior to the deconsolidation of Athora on January 1, 2018, Corporate and Other included our German operations, which were primarily comprised of participating long-duration savings products. See *Note 1 – Business, Basis of Presentation and Significant Accounting Policies* for discussion on the deconsolidation of our German operations in 2018.

Financial Measures—Segment adjusted operating income is an internal measure used by the chief operating decision maker to evaluate and assess the results of our segments.

Adjusted operating revenue is a component of adjusted operating income and excludes market volatility and adjustments for other non-operating activity. Our operating revenue equals our total revenue, adjusted to eliminate the impact of the following non-operating adjustments:

- Change in fair values of derivatives and embedded derivatives – index annuities, net of offsets;
- Investment gains (losses), net of offsets;
- VIE expenses and noncontrolling interest; and
- Other adjustments to revenues.

The table below reconciles segment adjusted operating revenues to total revenues presented on the condensed consolidated statements of income:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Retirement Services	$ 1,776	$ 936	$ 4,901	$ 3,078
Corporate and Other	18	94	71	265
Non-operating adjustments				
Change in fair values of derivatives and embedded derivatives – index annuities, net of offsets	884	379	823	1,181
Investment gains (losses), net of offsets	(82)	63	(337)	326
VIE expenses and noncontrolling interest	(1)	—	1	—
Other adjustments to revenues	(7)	1	(63)	5
Total revenues	$ 2,588	$ 1,473	$ 5,396	$ 4,855

Adjusted operating income is an internal measure used to evaluate our financial performance excluding market volatility and expenses related to integration, restructuring, stock compensation and certain other expenses. Our adjusted operating income equals net income adjusted to eliminate the impact of the following non-operating adjustments:

- Investment gains (losses), net of offsets;
- Change in fair values of derivatives and embedded derivatives – index annuities, net of offsets;
- Integration, restructuring and other non-operating expenses;
- Stock-based compensation, excluding the long-term incentive plan (LTIP); and
- Income tax (expense) benefit – non-operating.

The table below reconciles segment adjusted operating income to net income on the condensed consolidated statements of income:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Retirement Services	$ 389	$ 244	$ 913	$ 786
Corporate and Other	(8)	(13)	(5)	(9)
Non-operating adjustments				
Investment gains (losses), net of offsets	(48)	25	(155)	140
Change in fair values of derivatives and embedded derivatives – index annuities, net of offsets	380	46	550	155
Integration, restructuring and other non-operating expenses	(2)	(14)	(18)	(34)
Stock-based compensation, excluding LTIP	(3)	(7)	(8)	(30)
Income tax (expense) benefit – non-operating	(68)	(7)	(105)	(24)
Net income	$ 640	$ 274	$ 1,172	$ 984

The following represents total assets by segment:

(In millions)	September 30, 2018	December 31, 2017
Total assets by segment		
Retirement Services	$ 115,260	$ 91,335
Corporate and Other	2,944	8,412
Total assets	$ 118,204	$ 99,747

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

We are a leading retirement services company that issues, reinsures and acquires retirement savings products designed for the increasing number of individuals and institutions seeking to fund retirement needs. We generate attractive financial results for our policyholders and shareholders by combining our two core competencies of (1) sourcing long-term, generally illiquid liabilities and (2) investing in a high-quality investment portfolio, which takes advantage of the illiquid nature of our liabilities. Our steady and significant base of earnings generates capital that we opportunistically invest across our business to source attractively-priced liabilities and capitalize on opportunities. Our differentiated investment strategy benefits from our strategic relationship with Apollo and its indirect subsidiary, AAM. AAM provides a full suite of services for our investment portfolio, including direct investment management, asset allocation, mergers and acquisition asset diligence and certain operational support services, including investment compliance, tax, legal and risk management support. Our relationship with Apollo and AAM also provides us with access to Apollo's investment professionals around the world, as well as Apollo's global asset management infrastructure that supports a broad array of asset classes. We are led by a highly skilled management team with extensive industry experience. We are based in Bermuda with our U.S. subsidiaries' headquarters located in Iowa.

We began operating in 2009 when the burdens of the financial crisis and resulting capital demands caused many companies to exit the retirement market, creating the need for a well-capitalized company with an experienced management team to fill the void. Taking advantage of this market dislocation, we have been able to acquire substantial blocks of long-duration liabilities and reinvest the related investments to produce profitable returns. We have established a significant base of earnings and, as of September 30, 2018, have an expected annual investment margin of 2-3% over the 9.1 year weighted-average life of our deferred annuities, which make up a substantial portion of our reserve liabilities. As of September 30, 2018, the weighted-average life of all products, which includes deferred annuities, payout annuities, PRT obligations, funding agreements and other products, was 9.7 years.

We are diligent in setting our return targets based on market conditions and risks inherent in the products we offer and the acquisitions and block reinsurance transactions we undertake. Generally, we target mid-teen returns for sources of organic growth and mid-teen or higher returns for sources of inorganic growth. However, specific return targets are established with due consideration to the facts and circumstances surrounding each growth opportunity and may be higher or lower than those that we target more generally. Factors that we consider in establishing return targets for a given growth opportunity include, but are not limited to, the certainty of the return profile, the strategic nature of the opportunity, the size and scale of the opportunity, the alignment and fit of the opportunity with our existing business, the opportunity for risk diversification and the existence of increased opportunities for higher returns or growth. If market conditions or risks inherent in a product or transaction create return profiles that are not acceptable to us, we generally will not sacrifice our profitability merely to facilitate growth.

We operate our core business strategies out of one reportable segment, Retirement Services. In addition to Retirement Services, we report certain other operations in Corporate and Other. Retirement Services is comprised of our U.S. and Bermuda operations which issue and reinsure retirement savings products and institutional products. Corporate and Other includes certain other operations related to our corporate activities and previously included our former German operations, which were primarily comprised of participating long-duration savings products.

Our consolidated annualized ROE for the nine months ended September 30, 2018 and the year ended December 31, 2017 was 17.1% and 18.0%, respectively, and our consolidated annualized adjusted operating ROE was 14.5% and 15.8%, respectively. As a result of our focus on issuing, reinsuring and acquiring attractively-priced liabilities, our differentiated investment strategy and our significant scale, for the nine months ended September 30, 2018 and the year ended December 31, 2017, in our Retirement Services segment, we generated an annualized investment margin on deferred annuities of 2.70% and 2.82%, respectively, and an annualized adjusted operating ROE of 19.6% and 22.5%, respectively. We currently maintain what we believe to be high capital ratios for our rating and, as of September 30, 2018, hold approximately $2.0 billion of excess capital, and view this excess as strategic capital available to reinvest into organic and inorganic growth opportunities.

Our organic channels, including retail, flow reinsurance and institutional products, provided deposits of $8.0 billion in each of the nine months ended September 30, 2018 and 2017. Withdrawals on our deferred annuities, maturities of our funding agreements, payments on payout annuities and pension risk benefit payments (collectively, liability outflows), in the aggregate, were $5.7 billion and $4.4 billion for the nine months ended September 30, 2018 and 2017, respectively. We believe that our improving credit profile, our current product offerings and product design capabilities as well as our growing reputation as both a seasoned funding agreement issuer and a reliable PRT counterparty will continue to enable us to grow our existing organic channels and allow us to source additional volumes of profitably underwritten liabilities in various market environments.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

We plan to grow organically by expanding our retail, flow reinsurance and institutional distribution channels. We believe that we have the right people, infrastructure and scale to position us for continued growth. Within our retail channel, we had fixed annuity sales of $5.5 billion and $4.1 billion for the nine months ended September 30, 2018 and 2017, respectively. The increase in our retail channel was driven by significant growth in our bank channel and the addition of new bank partners, the rising rate environment and new product introductions. We aim to grow our retail channel in the United States by deepening our relationships with our approximately 70 independent marketing organizations (IMO) and more than 41,000 independent agents. Our strong financial position and capital efficient products allow us to be a dependable partner with IMOs and consistently write new business. We work with our IMOs to develop customized, and at times exclusive, products that help drive sales. We expect our retail channel to continue to benefit from our improving credit profile and recent product launches. We believe this should support growth in sales at our desired cost of crediting through increased volumes via current IMOs, while also allowing us to continue to expand our bank and broker-dealer channels. We are implementing the necessary technology platform, hiring and training a specialized sales force, and have created products to capture new potential distribution opportunities. In our flow reinsurance channel, we target reinsurance business consistent with our preferred liability characteristics and, as such, flow reinsurance provides another opportunistic channel for us to source long-term liabilities with attractive crediting rates. We generated deposits through our flow reinsurance channel of $1.3 billion and $570 million for the nine months ended September 30, 2018 and 2017, respectively. The increase in our flow reinsurance channel was driven by the addition of new partners, new product launches by our partners and the rising rate environment. As we continue to source additional reinsurance partners, we expect to further diversify our flow reinsurance channel and expect that our improving credit profile will help us attract additional reinsurance partners. Within our institutional channel, we generated deposits of $1.2 billion and $3.3 billion for the nine months ended September 30, 2018 and 2017, respectively. The decrease in our institutional channel is driven by the unfavorable market conditions for funding agreements. We issued funding agreements in the aggregate principal amount of $425 million and $3.0 billion for the nine months ended September 30, 2018 and 2017, respectively. During the nine months ended September 30, 2018, we closed four PRT transactions and issued group annuity contracts in the aggregate amount of $796 million, compared to $327 million during the nine months ended September 30, 2017. Subsequent to quarter end, we closed our fifth PRT transaction of the year and in connection with the closing, we issued a group annuity contract of approximately $800 million. We expect to grow our institutional channel by continuing to engage in opportunistic issuances of funding agreements and by continuing to engage in PRT transactions.

Our inorganic channels, including acquisitions and block reinsurance, provided deposits of $19.1 billion for the nine months ended September 30, 2018. On June 1, 2018, we closed on the Voya reinsurance transaction pursuant to which we entered into coinsurance and modco agreements with VIAC and RLI to reinsure a block of fixed and fixed indexed annuities providing $19.1 billion of deposits. Our inorganic channels have contributed significantly to our growth, and we expect will continue to be important sources of profitable growth in the future. We believe our internal transactions team, with support from Apollo, has an industry-leading ability to source, underwrite and expeditiously close transactions. With our relationship with Apollo, we are a solutions provider with a proven track record to close transactions, which we believe makes us the ideal partner to insurance companies seeking to restructure their business.

Deconsolidation Summary Included in Results of Operations

On January 1, 2018, in connection with the closing of the Athora Offering, our equity interest in the Athora was exchanged for common shares of Athora. See *Note 1 – Business, Basis of Presentation and Significant Accounting Policies* to the condensed consolidated financial statements for further details of the deconsolidation of our German operations. The deconsolidation of Athora decreased our total assets by $6.3 billion and our invested assets by $6.0 billion. The impact of this deconsolidation has an effect on the comparability of our historical results. To enhance the comparability of our September 30, 2018 and 2017 results, we highlight the financial results applicable to the deconsolidation of Athora where meaningful. As of and after January 1, 2018, our investment in Athora is reflected as an alternative investment.

Industry Trends and Competition

Market Conditions

While the U.S. Federal Reserve has continued its process of policy rate normalization, longer dated interest Treasury yields have risen, but not in step with shorter term rates, and as a consequence, the yield curve has flattened notably over the past twelve months. Whether signaling low long-term inflation expectations, or a coming curve inversion, or simply due to supply dynamics in the global search for asset yield, the level of longer dated Treasury yields affects the yield we earn on invested assets. The appreciable rise in such longer dated yields to date in 2018 has benefited such yields on new purchases. While current economic fundamentals appear strong, uncertainty about future fiscal policy, changes in tax policy, the scope of potential deregulation, the imposition of tariffs or other barriers to international trade and levels of global trade, along with uncertainty about the Federal Reserve's ability to manage its normalization process and the impact on inflation and wage growth, may trigger continued volatility across financial markets. Volatility, as seen recently in the equity markets, may adversely affect the hedging costs of our liability policy hedging program. Credit market volatility, which may widen credit spreads, benefits our investment purchases but may negatively affect the valuations of our in-force investment portfolio.

A volatile market environment may affect our ability to produce liability products that are profitable, have our desired risk profile, and are desirable to consumers. As a company with strong retirement, investment management and insurance capabilities, we expect that over the long term, market conditions resulting in higher Treasury yields and credit spreads will enhance the attractiveness of our portfolio of annuity products. We continue to monitor the behavior of our customers and other factors which react to market conditions, including mortality rates, morbidity rates, annuitization rates and lapse rates, in order to best serve our customers and generate strong profitability to our shareholders.

Interest Rate Environment

As a retirement services company focused on issuing and reinsuring fixed annuities, we are affected by the monetary policy of the Federal Reserve in the United States as well as other central banks around the world. In spite of the Federal Reserve increasing federal funds rates again in September of 2018, interest rates in the United States remain lower than historical levels. The lower interest rates in part are due to a number of actions taken in recent years by the Federal Reserve in an effort to stimulate economic activity. Any future increases in federal funds rates are uncertain and will depend on the economic outlook.

Our investment portfolio consists predominantly of fixed maturity investments. See *–Consolidated Investment Portfolio*. If prevailing interest rates were to rise, we believe the yield on our new investment purchases may also rise and our investment income from floating rate investments would increase, while the value of our existing investments may decline. If prevailing interest rates were to decline, it is likely that the yield on our new investment purchases may decline and our investment income from floating rate investments would decrease, while the value of our existing investments may increase. We address interest rate risk through managing the duration of the liabilities we source with assets we acquire through asset liability management (ALM) modeling. We endeavor to limit reinvestment risk related to cash flows by managing our asset portfolio to ensure it provides adequate cash flows to meet our expected policyholder benefit cash flows within tolerable risk management limits. Our strategy is to achieve sustainable yields that allow us to maintain an attractive investment margin. As part of our investment strategy, we purchase floating rate investments, which we expect will perform well in a rising interest rate environment. Our investment portfolio includes $18.5 billion of floating rate investments, or 18% of our total invested assets as of September 30, 2018. The percentage of floating rate investments decreased from December 31, 2017 due to the investment portfolio received in the Voya reinsurance transaction having a lower proportion of floating rate investments and a refinement in our definition to only include short duration securities that are directly tied or linked to an index. As part of our reinvestment strategy for the investment portfolios of companies we acquire or blocks we reinsure, we generally seek to reinvest assets at yields higher than the related assets being liquidated for reinvestment. We continuously seek to optimize our investment portfolio to achieve favorable returns over the long term.

If prevailing interest rates were to rise, we believe our products would be more attractive to consumers and our sales would likely increase. In periods of prolonged low interest rates, the investment margin earned on deferred annuities may be negatively impacted by reduced investment income to the extent that we are unable to adequately reduce policyholder crediting rates due to policyholder guarantees in the form of minimum crediting rates or otherwise due to market conditions. As of September 30, 2018, most of our products were fixed annuities with 26% of our FIAs at the minimum guarantees and 50% of our fixed rate annuities at the minimum crediting rates. As of September 30, 2018, minimum guarantees on all of our deferred annuities, including those with crediting rates already at their minimum guarantees, were, on average, 95 to 105 basis points below the crediting rates on such deferred annuities, allowing us room to reduce rates before reaching the minimum guarantees. Our remaining liabilities are associated with immediate annuities, pension risk transfer obligations, funding agreements or life contracts for which we have little to no discretionary ability to change the rates of interest payable to the respective policyholder. A significant majority of our products have crediting rates that we may reset annually upon renewal, following the expiration of the current guaranteed period. While we have the contractual ability to lower these crediting rates to the guaranteed minimum levels, our willingness to do so may be limited by competitive pressures.

See *Part I—Item 3. Quantitative and Qualitative Disclosures About Market Risks* to this report and *Part II—Item 7A. Quantitative and Qualitative Disclosures About Market Risks* in our 2017 Annual Report, which includes a discussion regarding interest rate and other significant risks and our strategies for managing these risks.

Demographics

Over the next four decades, the retirement-age population is expected to experience unprecedented growth. Technological advances and improvements in healthcare are projected to continue to contribute to increasing average life expectancy, and aging individuals must be prepared to fund retirement periods that will last longer than ever before. Further, many working households in the United States do not have adequate retirement savings. As a tool for addressing the unmet need for retirement planning, we believe that many Americans have begun to look to tax-efficient savings products with low-risk or guaranteed return features and potential equity market upside. Our tax-efficient savings products are well positioned to meet this increasing customer demand.

Competition

We operate in highly competitive markets. We face a variety of large and small industry participants, including diversified financial institutions and insurance and reinsurance companies. These companies compete in one form or another for the growing pool of retirement assets driven by a number of external factors such as the continued aging of the population and the reduction in safety nets provided by governments and private employers. In the markets in which we operate, scale and the ability to provide value-added services and build long-term relationships are important factors to compete effectively. We believe that our leading presence in the retirement market, diverse range of capabilities and broad distribution network uniquely position us to effectively serve consumers' increasing demand for retirement solutions, particularly in the FIA market.

According to LIMRA, total fixed annuity market sales in the United States were $60.9 billion for the six months ended June 30, 2018. LIMRA made adjustments to its fixed annuity sales estimate, and the updated total fixed annuity market sales in the United States were $55.6 billion for the six months ended June 30, 2017. The increase in fixed annuity market sales in 2018 compared to 2017 was mainly driven by an increase in FIA products of $4.0 billion, or 14.2% over prior year, as well as an increase in traditional fixed rate deferred annuities of $0.7 billion, or 3.6% over prior year. In the total fixed annuity market, for the six months ended June 30, 2018 (the most recent period for which specific market share data is available), we were the 5th largest company based on sales with a 5.5% market share and $3.3 billion in sales. For the six months ended June 30, 2017, our market share was 4.9% with sales of $2.7 billion.

FIAs have been one of the fastest growing annuity products, having grown from $27.3 billion in sales for the year ended December 31, 2005 to $55.0 billion in sales for the year ended December 31, 2017. According to LIMRA data, for the six months ended June 30, 2018 (the most recent period for which specific market share data is available), we were the 2nd largest provider of FIAs in terms of sales, and our market share for the same period was 9.1% with sales of $2.9 billion. For the six months ended June 30, 2017, our market share was 8.8% with sales of $2.5 billion.

Regulatory Developments

On December 22, 2017, President Trump signed the Tax Act into law, which introduced significant changes to the Internal Revenue Code. While our expectations may be subject to change, we expect the following notable impacts:

- *Overall tax rate*—Although the Tax Act reduces corporate income tax rates to 21% beginning in 2018, it also imposes a new minimum tax, referred to as the BEAT, which taxes modified taxable income at a rate of 5% beginning in 2018, increasing to 10% in 2019 and 12.5% in 2026. In general, modified taxable income is calculated by adding back to a taxpayer's regular taxable income the amount of certain "base erosion tax benefits" with respect to payments to foreign affiliates, as well as the "base erosion percentage" of any net operating loss deductions. The BEAT applies only to the extent it exceeds a taxpayer's regular corporate income tax liability (determined without regard to certain tax credits). The BEAT is expected to apply to our U.S. subsidiaries with respect to payments to our non-U.S. reinsurance subsidiaries. The BEAT does not apply to premium paid to ALRe directly by unaffiliated ceding companies or investment income earned on our non-U.S. reinsurance subsidiaries' surplus assets, which together currently represent approximately 25–30% of our pre-tax adjusted operating income. In addition to the BEAT, the 1% excise tax that we have historically paid will continue to apply to premiums paid to our Bermuda subsidiaries that are not subject to U.S. taxation.

  Within the context of affiliated modco arrangements, which is how much of our internal reinsurance is structured, it is our belief that the BEAT was generally intended to require the add back of the net amount paid or accrued by our U.S. subsidiaries to our non-U.S. reinsurance subsidiaries for premiums, investment income, reserve changes, other consideration and expenses (net basis). However, there is significant uncertainty regarding the computation of the BEAT in the context of affiliated modco arrangements, including whether the BEAT applies on a net basis or instead requires the add back of the gross amount paid or accrued, without reduction for claims or other expenses (gross basis). In light of this uncertainty, during the three months ended March 31, 2018, we restructured our affiliated modco arrangements to ensure that they would not be subject to the BEAT in the event that we do not receive guidance that the BEAT applies on a net basis, and during the three months ended September 30, 2018, we implemented additional reinsurance arrangements common in the insurance industry to further mitigate the potential effect on our results of operations should the BEAT apply on a gross basis. We currently expect that each of our effective tax rate and our overall tax rate, which includes the impacts of federal income tax, the BEAT and excise tax, will be between 9 and 10%, on average, over the near and medium term; however, we may experience significant fluctuations in these tax rates period-to-period, with certain periods falling outside of our expected range. Assuming that pre-tax income and adjusted operating income before tax are equal, the primary difference between our effective tax rate and our overall tax rate is the inclusion of excise taxes within the calculation of the overall tax rate. We currently expect excise taxes will be immaterial.

  The estimated future effective tax rate and overall tax rate presented above incorporates various assumptions and actual results may vary. See *Item 1A. Risk Factors–Our business, financial condition, liquidity, results of operations and cash flows depend on the accuracy of our management's assumptions and estimates, and we could face significant losses if these assumptions and estimates differ significantly from actual results–BEAT Mitigating Actions* and *Item 1A. Risk Factors–Risks Relating to Taxation–The BEAT may significantly increase our tax liability and our efforts to mitigate the cost of the BEAT may be unnecessary, inefficient, ineffective, or counterproductive*, each included in *Part II* of this report.

- *Risk-based capital*—In its meeting held on June 28, 2018, the NAIC Capital Adequacy Task Force approved updates to the RBC factors to reflect the change in the corporate income tax rate from 35% to 21% resulting from the Tax Act. The updates will be effective December 31, 2018. With the change in RBC factors, our RBC ratios, along with those of other fixed annuity writers and life insurers in general, are expected to decrease. If the changes were applied to our RBC ratios as of September 30, 2018, we estimate a minimal decrease to our onshore U.S. RBC ratio and approximately 10 to 12% decrease to our offshore ALRe RBC ratio. Our capital ratios under the various rating agency models applicable to us are not expected to be materially impacted by the change in tax rate, and those models are an important consideration in determining the appropriate levels of capital to run our business. Our initial assessment of the level of capital that we deem appropriate to run our business has not been impacted materially by the change in tax rate.

- *Controlled Foreign Corporation*—As discussed more fully at *Part II–Item 1A. Risk Factors–Risks Relating to Taxation–U.S. persons who own our Class A common shares may be subject to U.S. federal income taxation at ordinary income rates on our undistributed earnings and profits, adoption of the Tax Act resulted in certain changes affecting the determination as to whether an entity constitutes a Controlled Foreign Corporation (CFC)*. Being treated as a CFC could have adverse tax consequences to certain of our shareholders. To reduce the likelihood of such a result, we have restructured certain of our subsidiaries so that Athene USA, our U.S. holding company subsidiary, is now a wholly owned subsidiary of ALRe.

Other provisions of the Tax Act could significantly increase the tax liability of our U.S. subsidiaries in future tax periods by accelerating items of income or deferring deductions. Although the acceleration of an item of income or deferral of a deduction in one tax period allows a taxpayer to recognize less taxable income in a future period, there can be no assurance that we will be able to utilize any resulting deferred tax assets in future tax periods.

The foregoing represents our current expectations of certain of the effects of the Tax Act and may be subject to change as additional guidance is made available. See *Part II–Item 1A. Risk Factors–Risks Relating to Taxation* for further information on how the Tax Act could impact us.

Key Operating and Non-GAAP Measures

In addition to our results presented in accordance with GAAP, our results of operations include certain non-GAAP measures commonly used in our industry. Management believes the use of these non-GAAP measures, together with the relevant GAAP measures, provides information that may enhance an investor’s understanding of our results of operations and the underlying profitability drivers of our business. The majority of these non-GAAP measures are intended to remove from the results of operations the impact of market volatility (other than with respect to alternative investments) as well as integration, restructuring and certain other expenses which are not part of our underlying profitability drivers or likely to re-occur in the foreseeable future, as such items fluctuate from period to period in a manner inconsistent with these drivers. These measures should be considered supplementary to our results in accordance with GAAP and should not be viewed as a substitute for the GAAP measures. See *Non-GAAP Measure Reconciliations* for the appropriate reconciliations to the GAAP measures.

Adjusted Operating Income

Adjusted operating income is a non-GAAP measure used to evaluate our financial performance excluding market volatility and expenses related to integration, restructuring, stock compensation, and other expenses. Our adjusted operating income equals net income adjusted to eliminate the impact of the following (collectively, the “non-operating adjustments”):

- **Investment Gains (Losses), Net of Offsets—**Investment gains (losses), net of offsets, consist of the realized gains and losses on the sale of AFS securities, the change in assumed modco and funds withheld reinsurance embedded derivatives, unrealized gains and losses, impairments, and other investment gains and losses. Unrealized, impairments and other investment gains and losses are comprised of the fair value adjustments of trading securities (other than CLOs) and investments held under the fair value option, derivative gains and losses not hedging FIA index credits, and the net OTTI impacts recognized in operations net of the change in AmerUs Closed Block fair value reserve related to the corresponding change in fair value of investments and the change in unit-linked reserves related to the corresponding trading securities. Investment gains and losses are net of offsets related to DAC, DSI, and VOBA amortization and changes to guaranteed lifetime withdrawal benefit (GLWB) and guaranteed minimum death benefits (GMDB) reserves (together, GLWB and GMDB reserves represent rider reserves) as well as the MVAs associated with surrenders or terminations of contracts.

- **Change in Fair Values of Derivatives and Embedded Derivatives – FIAs, Net of Offsets—**Impacts related to the fair value accounting for derivatives hedging the FIA index credits and the related embedded derivative liability fluctuate from period to period. The index reserve is measured at fair value for the current period and all periods beyond the current policyholder index term. However, the FIA hedging derivatives are purchased to hedge only the current index period. Upon policyholder renewal at the end of the period, new FIA hedging derivatives are purchased to align with the new term. The difference in duration between the FIA hedging derivatives and the index credit reserves creates a timing difference in earnings. This timing difference of the FIA hedging derivatives and index credit reserves is included as a non-operating adjustment, net of offsets related to DAC, DSI, and VOBA amortization and changes to rider reserves.

  We primarily hedge with options that align with the index terms of our FIA products (typically 1–2 years). From an economic basis, we believe this is suitable because policyholder accounts are credited with index performance at the end of each index term. However, because the “value of an embedded derivative” in an FIA contract is longer-dated, there is a duration mismatch which may lead to mismatches for accounting purposes.

- **Integration, Restructuring, and Other Non-operating Expenses—**Integration, restructuring, and other non-operating expenses consist of restructuring and integration expenses related to acquisitions and block reinsurance costs as well as certain other expenses which are not part of our core operations or likely to re-occur in the foreseeable future.

- **Stock Compensation Expense—**Stock compensation expenses associated with our share incentive plans, excluding our long term incentive plan, are not part of our core operating expenses and fluctuate from time to time due to the structure of our plans.

- **Bargain Purchase Gain—**Bargain purchase gains associated with acquisitions are adjustments to net income as they are not consistent with our core operations.

- **Income Taxes (Expense) Benefit – Non-operating—**The non-operating income tax expense is comprised of the appropriate jurisdiction's tax rate applied to the non-operating adjustments that are subject to income tax.

We consider these non-operating adjustments to be meaningful adjustments to net income for the reasons discussed in greater detail above. Accordingly, we believe using a measure which excludes the impact of these items is effective in analyzing the trends in our results of operations. Together with net income, we believe adjusted operating income, provides a meaningful financial metric that helps investors understand our underlying results and profitability. Adjusted operating income should not be used as a substitute for net income.

Adjusted ROE, Adjusted Operating ROE and Adjusted Net Income

Adjusted ROE, adjusted operating ROE and adjusted net income are non-GAAP measures used to evaluate our financial performance excluding the impacts of AOCI and funds withheld and modco reinsurance unrealized gains and losses, in each case net of DAC, DSI, rider reserve and tax offsets. Adjusted ROE is calculated as adjusted net income, divided by average adjusted shareholders' equity. Adjusted shareholders' equity is calculated as the ending shareholders' equity excluding AOCI and funds withheld and modco reinsurance unrealized gains and losses. Adjusted operating ROE is calculated as the adjusted operating income, divided by average adjusted shareholders' equity. Adjusted net income is calculated as net income excluding funds withheld and modco reinsurance unrealized gains and losses, net of DAC, DSI, rider reserve and tax offsets. These adjustments fluctuate period to period in a manner inconsistent with our underlying profitability drivers as the majority of such fluctuation is related to the market volatility of the unrealized gains and losses associated with our AFS securities. Once we have reinvested acquired blocks of businesses, we typically buy and hold AFS investments to maturity throughout the duration of market fluctuations, therefore, the period-over-period impacts in unrealized gains and losses are not necessarily indicative of current adjusted operating fundamentals or future performance. Accordingly, we believe using measures which exclude AOCI and funds withheld and modco reinsurance unrealized gains and losses are useful in analyzing trends in our operating results. To enhance the ability to analyze these measures across periods, interim periods are annualized. Adjusted ROE, adjusted operating ROE and adjusted net income should not be used as a substitute for ROE and net income. However, we believe the adjustments to equity are significant to gaining an understanding of our overall results of operations.

Adjusted Operating Earnings Per Share, Weighted Average Shares Outstanding – Adjusted Operating and Adjusted Book Value Per Share

Adjusted operating earnings per share, weighted average shares outstanding – adjusted operating and adjusted book value per share are non-GAAP measures used to evaluate our financial performance and financial condition. The non-GAAP measures adjust the number of shares included in the corresponding GAAP measures to reflect the conversion or settlement of all shares and other stock-based awards outstanding. We believe using these measures represents an economic view of our share counts and provides a simplified and consistent view of our outstanding shares. Adjusted operating earnings per share is calculated as the adjusted operating income, over the weighted average shares outstanding – adjusted operating. Adjusted book value per share is calculated as the adjusted shareholders' equity divided by the adjusted operating common shares outstanding. Our Class B common shares are economically equivalent to Class A common shares and can be converted to Class A common shares on a one-for-one basis at any time. Our Class M common shares are in the legal form of shares but economically function as options as they are convertible into Class A shares after vesting and payment of the conversion price. In calculating Class A diluted earnings per share on a GAAP basis, we are required to apply sequencing rules to determine the dilutive impacts, if any, of our Class B common shares, Class M common shares and any other stock-based awards. To the extent our Class B common shares, Class M common shares and/or any other stock-based awards are not dilutive they are excluded. Weighted average shares outstanding – adjusted operating and adjusted operating common shares outstanding assume conversion or settlement of all outstanding items that are able to be converted to or settled in Class A common shares, including the impacts of Class B common shares on a one-for-one basis, the impacts of all Class M common shares net of the conversion price and any other stock-based awards, but excluding any awards for which the exercise or conversion price exceeds the market value of our Class A common shares on the applicable measurement date. For certain historical periods, Class M shares were not included due to issuance restrictions which were contingent upon our IPO. Adjusted operating earnings per share, weighted average shares outstanding – adjusted operating and adjusted book value per share should not be used as a substitute for basic earnings per share – Class A common shares, basic weighted average shares outstanding – Class A or book value per share. However, we believe the adjustments to the shares and equity are significant to gaining an understanding of our overall results of operations and financial condition.

Adjusted Debt to Capital Ratio

Adjusted debt to capital ratio is a non-GAAP measure used to evaluate our financial condition excluding the impacts of AOCI and funds withheld and modco reinsurance unrealized gains and losses, net of DAC, DSI, rider reserve and tax offsets. Adjusted debt to capital ratio is calculated as total debt excluding consolidated VIEs divided by adjusted shareholders' equity. Adjusted debt to capital ratio should not be used as a substitute for the debt to capital ratio. However, we believe the adjustments to shareholders' equity are significant to gaining an understanding of our capitalization, debt utilization, and debt capacity.

Retirement Services Net Investment Earned Rate, Cost of Crediting, Investment Margin on Deferred Annuities, Other Liability Costs and Operating Expenses

Investment margin is a key measurement of the financial health of our Retirement Services core deferred annuities. Investment margin on our deferred annuities is generated from the excess of our net investment earned rate over the cost of crediting to our policyholders. Net investment earned rate is a key measure of investment returns and cost of crediting is a key measure of the policyholder benefits on our deferred annuities.

Net investment earned rate is a non-GAAP measure we use to evaluate the performance of our invested assets that does not correspond to GAAP net investment income. Net investment earned rate is computed as the income from our invested assets divided by the average invested assets for the relevant period. To enhance the ability to analyze these measures across periods, interim periods are annualized. The adjustments to arrive at our net investment earned rate add alternative investment gains and losses, gains and losses related to trading securities for CLOs, net VIE impacts (revenues, expenses and noncontrolling interest) and the change in reinsurance embedded derivatives. We include the income and assets supporting our assumed reinsurance by evaluating the underlying investments of the funds withheld at interest receivables and we include the net investment income from those underlying investments which does not correspond to the GAAP presentation of reinsurance embedded derivatives. We exclude the income and assets supporting business that we have exited through ceded reinsurance including funds withheld agreements. We believe the adjustments for reinsurance provide a net investment earned rate on the assets for which we have economic exposure.

Cost of crediting is the interest credited to the policyholders on our fixed strategies as well as the option costs on the indexed annuity strategies. With respect to FIAs, the cost of providing index credits includes the expenses incurred to fund the annual index credits, and where applicable, minimum guaranteed interest credited. The interest credited on fixed strategies and option costs on indexed annuity strategies are divided by the average account value of our deferred annuities. Our average account values are averaged over the number of quarters in the relevant period to obtain our cost of crediting for such period. To enhance the ability to analyze these measures across periods, interim periods are annualized.

Net investment earned rate, cost of crediting and investment margin on deferred annuities are non-GAAP measures we use to evaluate the profitability of our core deferred annuities business. Deferred annuities include our fixed rate annuities and FIAs, which account for approximately 85% of our Retirement Services reserve liabilities as of September 30, 2018. We believe measures like net investment earned rate, cost of crediting and investment margin on deferred annuities are effective in analyzing the trends of our core business operations, profitability and pricing discipline. While we believe net investment earned rate, cost of crediting and investment margin on deferred annuities are meaningful financial metrics and enhance our understanding of the underlying profitability drivers of our business, they should not be used as a substitute for net investment income and interest sensitive contract benefits presented under GAAP.

Other liability costs include DAC, DSI and VOBA amortization, rider reserves, institutional costs, the cost of liabilities on products other than deferred annuities, premiums, product charges and other revenues. Along with our cost of crediting, other liability costs give a view of the total costs of our liabilities. We believe a measure like other liability costs is effective in analyzing the trends of our core business operations and profitability. While we believe other liability costs is a meaningful financial metric and enhances our understanding of the underlying profitability drivers of our business, it should not be used as a substitute for total benefits and expenses presented under GAAP.

Operating expenses excludes integration, restructuring and other non-operating expenses, stock compensation expense, interest expense and policy acquisition expenses. We believe a measure like operating expenses is effective in analyzing the trends of our core business operations and profitability. While we believe operating expenses is a meaningful financial metric and enhances our understanding of the underlying profitability drivers of our business, it should not be used as a substitute for policy and other operating expenses presented under GAAP.

Invested Assets

In managing our business we analyze invested assets, which do not correspond to total investments, including investments in related parties, as disclosed in our consolidated financial statements and notes thereto. Invested assets represent the investments that directly back our policyholder liabilities as well as surplus assets. Invested assets is used in the computation of net investment earned rate, which allows us to analyze the profitability of our investment portfolio. Invested assets includes (a) total investments on the consolidated balance sheets with AFS securities at cost or amortized cost, excluding derivatives, (b) cash and cash equivalents and restricted cash, (c) investments in related parties, (d) accrued investment income, (e) the consolidated VIE assets, liabilities and noncontrolling interest, (f) net investment payables and receivables and (g) policy loans ceded (which offset the direct policy loans in total investments). Invested assets also excludes assets associated with funds withheld liabilities related to business exited through reinsurance agreements and derivative collateral (offsetting the related cash positions). We include the underlying investments supporting our assumed funds withheld and modco agreements in our invested assets calculation in order to match the assets with the income received. We believe the adjustments for reinsurance provide a view of the assets for which we have economic exposure. Our invested assets are averaged over the number of quarters in the relevant period to compute our net investment earned rate for such period.

Reserve Liabilities

In managing our business we also analyze reserve liabilities, which does not correspond to total liabilities as disclosed in our consolidated financial statements and notes thereto. Reserve liabilities represents our policyholder liability obligations net of reinsurance and is used to analyze the costs of our liabilities. Reserve liabilities includes (a) the interest sensitive contract liabilities, (b) future policy benefits, (c) dividends payable to policyholders, and (d) other policy claims and benefits, offset by reinsurance recoverable, excluding policy loans ceded. Reserve liabilities is net of the ceded liabilities to third-party reinsurers as the costs of the liabilities are passed to such reinsurers and therefore we have no net economic exposure to such liabilities, assuming our reinsurance counterparties perform under our agreements. The majority of our ceded reinsurance is a result of reinsuring large blocks of life business following acquisitions. For such transactions, GAAP requires the ceded liabilities and related reinsurance recoverables to continue to be recorded in our consolidated financial statements despite the transfer of economic risk to the counterparty in connection with the reinsurance transaction.

Sales

Sales statistics do not correspond to revenues under GAAP, but are used as relevant measures to understand our business performance as it relates to deposits generated during a specific period of time. Our sales statistics include deposits for fixed rate annuities and FIAs and align with the LIMRA definition of all money paid into an individual annuity, including money paid into new contracts with initial purchase occurring in the specified period and existing contracts with initial purchase occurring prior to the specified period (excluding internal transfers).

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Consolidated Results of Operations

The following summarizes the consolidated results of operations:

	Three months ended September 30,		Nine months ended September 30,	
(In millions, except percentages)	2018	2017	2018	2017
Revenues	$ 2,588	$ 1,473	$ 5,396	$ 4,855
Benefits and expenses	1,882	1,179	4,033	3,818
Income before income taxes	706	294	1,363	1,037
Income tax expense	66	20	191	53
Net income	$ 640	$ 274	$ 1,172	$ 984
Net income	$ 640	$ 274	$ 1,172	$ 984
Non-operating adjustments				
Realized gains (losses) on sale of AFS securities	5	29	33	64
Unrealized, impairments and other investment gains (losses)	11	(3)	27	(15)
Assumed modco and funds withheld reinsurance embedded derivatives	(93)	20	(300)	153
Offsets to investment gains (losses)	29	(21)	85	(62)
Investment gains (losses), net of offsets	(48)	25	(155)	140
Change in fair values of derivatives and embedded derivatives – FIAs, net of offsets	380	46	550	155
Integration, restructuring and other non-operating expenses	(2)	(14)	(18)	(34)
Stock compensation expense	(3)	(7)	(8)	(30)
Income tax (expense) benefit – non-operating	(68)	(7)	(105)	(24)
Less: Total non-operating adjustments	259	43	264	207
Adjusted operating income	$ 381	$ 231	$ 908	$ 777
Adjusted operating income by segment				
Retirement Services	$ 389	$ 244	$ 913	$ 786
Corporate and Other	(8)	(13)	(5)	(9)
Adjusted operating income	$ 381	$ 231	$ 908	$ 777
ROE	29.1%	13.0%	17.1%	16.9%
Adjusted ROE	31.4%	14.6%	21.8%	17.1%
Adjusted operating ROE	17.5%	12.8%	14.5%	15.0%

We operate our core business strategies out of one reportable segment, Retirement Services. In addition to Retirement Services, we report certain other operations in Corporate and Other. See *Results of Operations by Segment* for further detail on the results of the segments.

Three Months Ended September 30, 2018 Compared to the Three Months Ended September 30, 2017

In this section, references to 2018 refer to the three months ended September 30, 2018 and references to 2017 refer to the three months ended September 30, 2017.

Net Income

Net income increased by $366 million, or 134%, to $640 million in 2018 from $274 million in 2017. ROE increased to 29.1% from 13.0% in 2017, and adjusted ROE increased to 31.4% from 14.6% in 2017. The increase in net income was driven by a favorable net change in FIA derivatives and a $150 million increase in adjusted operating income, partially offset by unfavorable assumed reinsurance embedded derivative impacts. The net change in FIA derivatives was driven by our annual unlocking of assumptions, the change in performance of the equity indices to which our FIA policies are linked compared to 2017, and the favorable increase in discount rates. Assumed reinsurance embedded derivative impacts were unfavorable due to growth in the reinsurance block from the Voya reinsurance transaction, increases in U.S treasury rates, partially offset by credit spreads tightening more than prior year.

Our annual process of unlocking assumptions resulted in an increase in pre-tax income of $178 million, compared to a decrease of $33 million in 2017. Unlocking in the third quarter was driven by an increase of $191 million primarily related to FIA embedded derivatives net of offsets, partially offset by a decrease of $13 million in adjusted operating income attributable to DAC, DSI and VOBA amortization and rider reserves.

Adjusted Operating Income

Adjusted operating income increased by $150 million or 65%, to $381 million in 2018 from $231 million in the prior period. Adjusted operating ROE was 17.5%, up from 12.8% in 2017. The increase in adjusted operating income was primarily driven by an increase in investment income, a tax benefit in 2018 attributed to the implementation of additional reinsurance arrangements common in the industry and the deconsolidation of our German operations which had an operating loss of $17 million in 2017, partially offset by higher cost of crediting and other liability costs. The increase in investment income was driven by earnings from the Voya reinsurance transaction, invested asset growth and increased floating rate investment income which resulted from higher short-term interest rates. Cost of crediting was higher driven by block growth, including the addition of Voya liabilities, and an increase in option costs which increased the cost of hedging. Other liability costs increased driven by block growth, partially offset by favorable rider reserve and DAC amortization related to more favorable equity market performance compared to 2017 and favorable unlocking.

Our annual process of unlocking assumptions resulted in an increase in other liability costs of $13 million, compared to an increase of $20 million in 2017.

Our consolidated net investment earned rate was 4.52% in 2018, an increase from 4.45% in 2017, primarily due to the performance in our fixed and other portfolio. Fixed and other net investment earned rate of 4.33% increased from 4.23% in 2017, driven by higher floating rate investment income in the quarter and the deconsolidation of Germany, partially offset by lower returns on assets from the Voya reinsurance transaction.

Revenues

Total revenue increased by $1.1 billion to $2.6 billion in 2018 from $1.5 billion in 2017. The increase was driven by an increase in premiums, increase in investment related gains and losses, higher net investment income and an increase in product charges.

Premiums increased by $459 million to $531 million in 2018 from $72 million in the prior period, driven by higher PRT premiums and an increase in premium from flow reinsurance.

Investment related gains and losses increased by $350 million to $823 million in 2018 from $473 million in the prior year, primarily due to the change in fair value of FIA hedging derivatives. The change in fair value of FIA hedging derivatives increased $395 million driven by the performance of the indices upon which our call options are based. The S&P 500 index increased 7.2% in 2018 compared to an increase of 4.0% in 2017. The change in assumed reinsurance embedded derivatives increased $19 million driven by an increase in the reinsurance block related to the Voya reinsurance transactions. The assumed reinsurance embedded derivatives were unfavorably impacted by the change in underlying assets related to the increase in U.S. treasury rates, partially offset by credit spreads tightening more than the prior year.

Net investment income increased by $250 million to $1.1 billion in 2018 from $820 million in 2017, primarily driven by earnings from growth in our investment portfolio attributed to a strong increase in deposits over the prior twelve months, investment earnings from the Voya reinsurance transaction and higher floating rate investment income of $25 million due to higher short-term interest rates, partially offset by the deconsolidation of Germany in 2018.

Product charges increased by $33 million to $119 million in 2018 from $86 million in the prior period, primarily driven by higher rider charges related to growth in the block of business and charges related to the addition of the Voya liabilities.

Benefits and Expenses

Total benefits and expenses increased by $703 million to $1.9 billion in 2018 from $1.2 billion in 2017. The increase was driven by an increase in future policy benefits and an increase in interest sensitive contract benefits, partially offset by a decrease in amortization of DAC and VOBA and a decrease in dividends to policyholders.

Future policy and other policy benefits increased by $661 million to $920 million in 2018 from $259 million in 2017, primarily attributable to higher PRT premiums, an increase in rider reserves and an increase in reserves from flow reinsurance, partially offset by $58 million related to the deconsolidation of our former German subsidiaries. The increase in rider reserves was driven by an increase related to our annual unlocking of assumptions of $163 million, an increase related to the net change in FIA derivatives and growth in the block, partially offset by favorable equity market performance compared to 2017 resulting in increased index credits to policyholder accounts, which lowered the amount needed to fund the rider reserve. Unlocking in 2018 was unfavorable by $212 million related to impacts in lapse assumptions partially offset by utilization of certain rider benefits, while 2017 unlocking impacts were unfavorable $49 million related to impacts of the net investment earned rate and mortality assumptions.

Interest sensitive contract benefits increased by $120 million to $741 million in 2018 from $621 million in 2017, driven by an increase in FIA fair value embedded derivatives of $81 million and growth in the block of business. The increase in FIA fair value embedded derivatives was due to the performance of the equity indices to which our FIA policies are linked, partially offset by unlocking of assumptions and a favorable change in discount rates used in our embedded derivative calculations as the current quarter experienced an increase in discount rates compared to 2017, which experienced a decrease in discount rates. The FIA fair value embedded derivatives were favorably impacted by $309 million related to our annual unlocking of assumptions which was mainly driven by updating lapse assumptions.

DAC, DSI, and VOBA amortization decreased by $40 million to $53 million in 2018 from $93 million in the prior year, primarily due to favorable decrease to our annual unlocking of assumptions of $66 million, favorable equity market performance compared to 2017 and unfavorable investment related gains and losses, partially offset by an increase in the DAC asset balance related to block growth and an increase in the net change in FIA derivatives. Unlocking in 2018 was favorable $81 million related to impacts in lapse assumptions, while 2017 unlocking impacts were favorable $16 million related to impacts of the net investment earned rate and mortality assumptions.

Dividends to policyholders decreased by $38 million to $10 million in 2018 from $48 million in the prior year, primarily attributed to the deconsolidation of our former German subsidiaries.

Taxes

Income tax expense increased by $46 million to $66 million in 2018 from $20 million in 2017. With the enactment of the Tax Act, the U.S. statutory tax rate declined to 21% from 35%; however, the BEAT was established, which may subject payments to our non-U.S. reinsurance subsidiaries to a tax of 5%, which would increase to 10% in 2019. The income tax expense for 2018 reflects the restructuring of our internal modco arrangements and implementation of additional reinsurance arrangements common in the insurance industry.

For the three months ended September 30, 2018, income tax expense includes a $42 million income tax benefit resulting from the reversal of previously accrued taxes during the first six months of 2018, which was partially offset by $2 million of excise tax expense. The reversal of previously accrued tax expense was triggered by a revised full year estimated tax provision driven by the implementation, in the third quarter, of additional reinsurance arrangements common in the insurance industry. The additional reinsurance arrangements were retroactively effective to January 1, 2018.

Our effective tax rates were 9% in 2018 and 7% in 2017. The effective tax rate excludes the impacts of an excise tax benefit of $3 million in 2018 and expense of $12 million in 2017. Our effective tax rates may vary period to period depending upon the relationship of income and loss subject to tax compared to consolidated income and loss before income taxes.

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017

In this section, references to 2018 refer to the nine months ended September 30, 2018 and references to 2017 refer to the nine months ended September 30, 2017.

Net Income

Net income increased by $188 million, or 19%, to $1.2 billion in 2018 from $984 million in 2017. ROE increased to 17.1% from 16.9% in 2017 and adjusted ROE increased to 21.8% from 17.1% in 2017. The increase in net income was driven by a $131 million increase in adjusted operating income and a favorable net change in FIA derivatives, partially offset by unfavorable assumed reinsurance embedded derivative impacts and higher tax expense. The net change in FIA derivatives was driven by a favorable increase in discount rates compared to 2017 and unlocking, partially offset by the change in performance of the equity indices to which our FIA policies are linked compared to 2017. Assumed reinsurance embedded derivative impacts were unfavorable due to increases in U.S treasury rates and credit spreads widening compared to the prior year, which benefited from credit spreads tightening.

Our annual process of unlocking assumptions resulted in an increase in pre-tax income of $178 million, compared to a decrease of $33 million in 2017. Unlocking in the third quarter of 2018 was driven by an increase of $191 million primarily related to FIA embedded derivatives net of offsets, partially offset by a decrease of $13 million in adjusted operating income attributable to DAC, DSI and VOBA amortization and rider reserves.

Adjusted Operating Income

Adjusted operating income increased by $131 million, or 17%, to $908 million in 2018 from $777 million in the prior period. Adjusted operating ROE was 14.5%, down from 15.0% in 2017. The increase in adjusted operating income was primarily driven by an increase in investment income, partially offset by an increase in cost of crediting, other liability costs, interest expense and tax expense. The increase in investment income was primarily due to invested asset growth, earnings from the Voya reinsurance transaction and increased floating rate investment income related to higher short-term interest rates. Cost of crediting was higher driven by block growth, including the addition of Voya liabilities, and an increase in option costs which increased the cost of hedging. Other liability costs increased primarily due to growth in the block, including the addition of Voya liabilities, higher rider reserves and DAC amortization related to less favorable equity market performance compared to 2017, and favorable actuarial out of period adjustments in 2017, partially offset by lower excise taxes and favorable unlocking compared to 2017.

Our annual process of unlocking assumptions resulted in an increase in other liability costs of $13 million, compared to an increase of $20 million in 2017.

Our consolidated net investment earned rate was 4.61% in 2018, an increase from 4.55% in 2017, primarily due to the performance in our fixed and other portfolio. Fixed and other net investment earned rate of 4.38% increased from 4.29% in 2017 driven by higher floating rate investment income in 2018 and the deconsolidation of Germany, partially offset by lower new money rates over the past year and lower returns on assets from the Voya reinsurance transaction.

Revenues

Total revenue increased by $541 million to $5.4 billion in 2018 from $4.9 billion in 2017. The increase was driven by an increase in premiums, higher net investment income and an increase in product charges, partially offset by unfavorable changes in investment related gains and losses.

Premiums increased by $1.0 billion to $1.5 billion in 2018 from $503 million in the prior period, driven by the Voya reinsurance inception premiums attributed to payout annuities with life contingencies, higher PRT premium and an increase in premium from flow reinsurance, partially offset by the deconsolidation of Germany.

Net investment income increased by $456 million to $2.9 billion in 2018 from $2.4 billion in 2017, primarily driven by earnings from growth in our investment portfolio attributed to a strong increase in deposits over the prior twelve months, earnings from the Voya reinsurance transaction, higher floating rate investment income of $85 million due to higher short-term interest rates and higher income in one of our hedge funds, partially offset by the deconsolidation of our former German subsidiaries.

Product charges increased by $69 million to $321 million in 2018 from $252 million in the prior period, primarily driven by higher rider charges related to growth in the block of business and charges related to the addition of the Voya liabilities.

Investment related gains and losses decreased by $1.0 billion to $585 million in 2018 from $1.6 billion in the prior period, primarily due to the change in fair value of FIA hedging derivatives, the change in assumed reinsurance embedded derivatives and the unfavorable change in unrealized gains and losses on trading securities. The change in fair value of FIA hedging derivatives decreased by $437 million driven by the performance of the indices upon which our call options are based. The S&P 500 index experienced a 9.0% increase in 2018, compared to an 12.5% increase in 2017. The assumed reinsurance embedded derivatives decreased by $315 million driven by a change in the value of the underlying assets related to the increase in U.S. treasury rates and credit spreads widening compared to the prior year, which benefited from credit spreads tightening. Both of these drivers were magnified by growth in the reinsurance block related to the Voya transactions. The change in unrealized gains and losses on trading securities was comprised of an unfavorable decrease in AmerUs Closed Block assets of $147 million related to higher unrealized losses due to the increase in U.S. treasury rates.

Benefits and Expenses

Total benefits and expenses increased by $215 million to $4.0 billion in 2018 from $3.8 billion in 2017. The increase was driven by an increase in future policy and other policy benefits, partially offset by a decrease in interest sensitive contract benefits, a decrease in dividends payable to policyholders, and a decrease to policy and other operating expenses.

Future policy and other policy benefits increased by $1.1 billion to $2.2 billion in 2018 from $1.1 billion in 2017, primarily attributable to the Voya reinsurance policyholder obligations at inception related to payout annuities with life contingencies, higher PRT obligations and an increase in rider reserves, partially offset by $167 million related to the deconsolidation of our former German subsidiaries and a decrease in the change in AmerUs Closed Block fair value liability. The increase in rider reserves of $256 million was primarily driven by an increase related to our annual unlocking of assumptions of $163 million, an increase related to the net change in FIA derivatives and growth in the block, partially offset by more favorable equity market performance in 2017. Unlocking in 2018 was unfavorable $212 million related to impacts in lapse assumptions partially offset by utilization of certain rider benefits, while 2017 unlocking impacts were unfavorable $49 million related to impacts of the net investment earned rate and mortality assumptions. The favorable change in the AmerUs Closed Block fair value liability of $164 million was primarily driven by the increase in unrealized losses on the underlying investments related to the increase in U.S. treasury rates.

Interest sensitive contract benefits decreased by $774 million to $1.1 billion in 2018 from $1.9 billion in 2017, primarily due to the change in FIA fair value embedded derivatives, partially offset by growth in the block of business. The change in FIA fair value embedded derivatives decreased by $817 million primarily driven by a favorable change in discount rates used in our embedded derivative calculations as the current period experienced an increase in discount rates compared to 2017, which experienced a decrease in discount rates. The change was also attributed to the performance of the equity indices to which our FIA policies are linked, primarily the S&P 500 index, which experienced a 9.0% increase in 2018, compared to a 12.5% increase in 2017. Additionally, the FIA fair value embedded derivatives were favorably impacted $309 million related to our annual unlocking of assumptions which was mainly driven by updating lapse assumptions.

Dividends to policyholders decreased by $97 million to $32 million in 2018 from $129 million in the prior year, primarily attributed to the deconsolidation of our former German subsidiaries.

Policy and other operating expenses decreased by $26 million to $453 million in 2018 from $479 million in the prior year, primarily driven by $53 million related to the deconsolidation of Germany and lower stock compensation expense of $22 million, partially offset by debt costs related to our debt issuance in January 2018.

DAC, DSI, and VOBA amortization decreased by $16 million to $277 million in 2018 from $293 million in the prior year, primarily due to a favorable decrease to our annual unlocking of assumptions of $66 million and unfavorable investment related gains and losses, partially offset by an increase in the DAC asset balance related to block growth and an increase in the net change in FIA derivatives. Unlocking in 2018 was favorable $81 million related to impacts in lapse assumptions, while 2017 unlocking impacts were favorable $16 million related to impacts of the net investment earned rate and mortality assumptions.

Taxes

Income tax expense increased by $138 million to $191 million in 2018 from $53 million in 2017. With the enactment of the Tax Act, the U.S. statutory tax rate declined to 21% from 35%; however, the BEAT was established, which may subject payments to our non-U.S. reinsurance subsidiaries to a tax of 5%, which would increase to 10% in 2019. The income tax expense for 2018 reflects the restructuring of our internal modco arrangements and implementation of additional reinsurance arrangements common in the insurance industry.

Our effective tax rates were 14% in 2018 and 5% in 2017. The effective tax rate excludes the impacts of an excise tax benefit of $3 million in 2018 and expense of $37 million in 2017. Our effective tax rates may vary period to period depending upon the relationship of income and loss subject to tax compared to consolidated income and loss before income taxes.

Results of Operations by Segment

The following summarizes our adjusted operating income by segment:

	Three months ended September 30,		Nine months ended September 30,	
(In millions, except percentages)	2018	2017	2018	2017
Adjusted operating income by segment				
Retirement Services	$ 389	$ 244	$ 913	$ 786
Corporate and Other	(8)	(13)	(5)	(9)
Adjusted operating income	$ 381	$ 231	$ 908	$ 777
Retirement Services adjusted operating ROE	23.6%	19.1%	19.6%	21.8%

Retirement Services

Retirement Services is comprised of our United States and Bermuda operations which issue and reinsure retirement savings products and institutional products. Retirement Services has retail operations, which provide annuity retirement solutions to our policyholders. Retirement Services also has reinsurance operations, which reinsure multi-year guaranteed annuities (MYGA), FIAs, traditional one year guarantee fixed deferred annuities, immediate annuities and institutional products from our reinsurance partners. In addition, our institutional operations, including funding agreements and PRT obligations, are included in our Retirement Services segment.

Three Months Ended September 30, 2018 Compared to the Three Months Ended September 30, 2017

In this section, references to 2018 refer to the three months ended September 30, 2018 and references to 2017 refer to the three months ended September 30, 2017.

Adjusted Operating Income

Adjusted operating income increased by $145 million, or 59%, to $389 million in 2018, from $244 million in 2017. Adjusted operating ROE was 23.6%, up from 19.1% in the prior period. The increase in adjusted operating income was primarily driven by an increase in net investment earnings and a tax benefit in 2018 attributed to the implementation of additional reinsurance arrangements common in the industry, partially offset by higher cost of crediting and other liability costs.

Net investment earnings increased $297 million primarily driven by earnings from the Voya reinsurance transaction, invested asset growth reflecting strong organic deposits, higher floating rate income of $25 million related to higher short-term interest rates, and strong alternative performance reflecting strong performance from MidCap and AmeriHome.

Cost of crediting increased $127 million driven by block growth, including the addition of Voya liabilities, and an increase in option costs due to higher volatility and short-term interest rates which increased the cost of hedging.

Other liability costs increased $33 million driven by block growth, including the addition of Voya liabilities, partially offset by favorable rider reserve and DAC amortization related to more favorable equity market performance resulting in a favorable $38 million impact in 2018 compared to a $20 million benefit in 2017, as well as favorable unlocking. Unlocking in 2018 resulted in an increase in other liability costs of $13 million compared to an increase of $20 million in prior year. Unlocking in 2018 related to impacts in lapse assumptions partially offset by utilization of certain rider benefits, while 2017 related to impacts of the net investment earned rate and mortality assumptions.

Investment Margin on Deferred Annuities

	Three months ended September 30,	
	2018	2017
Net investment earned rate	4.55%	4.64%
Cost of crediting	1.98%	1.88%
Investment margin on deferred annuities	2.57%	2.76%

Investment margin on deferred annuities decreased by 19 basis points to 2.57% in 2018, from 2.76% in 2017. The decrease in the investment margin on deferred annuities was driven by a decrease in net investment earned rate of 9 basis points, and an unfavorable increase in cost of crediting of 10 basis points.

Net investment earned rate decreased due to the decrease in fixed and other net investment earned rates, partially offset by the increase in alternative net investment earned rates. The fixed and other net investment earned rate decreased in 2018 to 4.33% from 4.44% in 2017 primarily attributed to lower returns on the assets from the Voya reinsurance transaction, partially offset by higher floating rate investment income in the quarter. The alternative net investment earned rate remained strong in 2018 at 10.65% compared to 9.79% in 2017 driven by strong MidCap and AmeriHome performance for the quarter returning 18.23% and 14.66%, respectively.

Cost of crediting on deferred annuities increased by 10 basis points to 1.98% in 2018, from 1.88% in 2017. The increase in cost of crediting was driven by a higher rate on the Voya reinsurance liabilities as well as an increase in option costs due to higher volatility and short-term interest rates.

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017

In this section, references to 2018 refer to the nine months ended September 30, 2018 and references to 2017 refer to the nine months ended September 30, 2017.

Adjusted Operating Income

Adjusted operating income increased by $127 million, or 16%, to $913 million in 2018, from $786 million in 2017. Adjusted operating ROE was 19.6%, down from 21.8% in the prior period. The increase in adjusted operating income was primarily driven by higher net investment earnings, partially offset by an increase in cost of crediting, other liability costs, operating expenses and tax expense.

Net investment earnings increased $545 million driven primarily by earnings from growth in invested assets of $27.7 billion primarily attributed to the Voya reinsurance transaction and a strong increase in deposits over the prior twelve months, an increase of floating rate investment income of $85 million related to higher short-term interest rates and higher alternative investment income. Alternative investment income increased driven by higher income in one of our hedge funds and strong performance from MidCap.

Cost of crediting increased $193 million driven by block growth, including the addition of Voya liabilities, and an increase in option costs due to higher volatility and short-term interest rates which increased the cost of hedging.

Other liability costs increased $156 million driven by growth in the block, including the addition of Voya liabilities, higher rider reserves and DAC amortization related to less favorable equity market performance resulting in a benefit of $36 million impact in 2018 compared to a benefit of $98 million in 2017, and favorable actuarial out of period adjustments in 2017, partially offset by lower excise taxes and favorable unlocking compared to 2017.

Operating expenses increased $20 million primarily attributable to growing our business and expanding our distribution channels.

Operating tax expenses increased $47 million reflecting the enactment of the Tax Act and the restructuring of our internal modco arrangements and implementation of additional reinsurance arrangements common in the insurance industry.

Investment Margin on Deferred Annuities

	Nine months ended September 30,	
	2018	2017
Net investment earned rate	4.63%	4.75%
Cost of crediting	1.93%	1.89%
Investment margin on deferred annuities	2.70%	2.86%

Investment margin on deferred annuities decreased by 16 basis points to 2.70% in 2018, from 2.86% in 2017. The decrease in the investment margin on deferred annuities was driven by the decrease in net investment earned rate of 12 basis points and an unfavorable increase in cost of crediting of 4 basis points.

Net investment earned rate decreased due to the decrease in fixed and other net investment earned rate. The fixed and other net investment earned rate decreased in 2018, to 4.38% from 4.50% in 2017 primarily attributed to lower returns on the assets from the Voya reinsurance transaction, lower new money rates over the past year and higher levels of cash during 2018, partially offset by higher floating rate investment income. The alternative net investments earned rate increased in 2018 to 11.30% from 10.86% in 2017, reflecting higher income in one of our hedge funds and strong performance from MidCap.

Cost of crediting on deferred annuities increased by 4 basis points to 1.93% in 2018, from 1.89% in 2017. The increase in cost of crediting was driven by a higher rate on the Voya reinsurance liabilities and an increase in option costs due to higher volatility and short-term interest rates, partially offset by rate actions on business that renewed in 2017.

Corporate and Other

Corporate and Other includes certain other operations related to our corporate activities, including corporate allocated expenses, merger and acquisition costs, debt costs, certain integration and restructuring costs, certain stock-based compensation and intersegment eliminations. In Corporate and Other, we also hold capital in excess of the level of capital we hold in Retirement Services to support our operating strategy. Prior to the deconsolidation of Athora on January 1, 2018, Corporate and Other included our German operations, which were primarily comprised of participating long-duration savings products.

Adjusted Operating Income (Loss)

Adjusted operating loss decreased by $5 million to $8 million in the three months ended September 30, 2018, from $13 million in the three months ended September 30, 2017. The decrease in adjusted operating loss was mainly driven by the deconsolidation of our German operations partially offset by lower alternative investment income due to the decline in the market value of public equity positions in one of our funds. Our former German operations, which were deconsolidated on January 1, 2018, had an adjusted operating loss of $17 million in the three months ended September 30, 2017.

Adjusted operating loss decreased by $4 million to $5 million in the nine months ended September 30, 2018, from $9 million in the nine months ended September 30, 2017. The decrease in adjusted operating loss was mainly driven by the deconsolidation of our German operations offset by lower alternative investment income related to the decline in market value of public equity positions in one of our funds and debt costs from our debt issuance in January 2018. Our former German operations, which deconsolidated on January 1, 2018, had an adjusted operating loss of $28 million in the nine months ended September 30, 2017.

Consolidated Investment Portfolio

We had consolidated investments, including related parties, of $101.4 billion and $84.4 billion as of September 30, 2018 and December 31, 2017, respectively. Our investment strategy seeks to achieve sustainable risk-adjusted returns through the disciplined management of our investment portfolio against our long-duration liabilities, coupled with the diversification of risk. The investment strategies utilized by our investment managers focus primarily on a buy and hold asset allocation strategy that may be adjusted periodically in response to changing market conditions and the nature of our liability profile. The significant majority of our investment portfolio is managed by AAM, an indirect subsidiary of Apollo founded for the express purpose of managing our portfolio. AAM provides a full suite of services for our investment portfolio, including direct investment management, asset allocation, mergers and acquisition asset diligence, and certain operational support services, including investment compliance, tax, legal and risk management support. Our relationship with AAM and Apollo allows us to take advantage of our generally illiquid liability profile by identifying investment opportunities with an emphasis on earning incremental yield by taking liquidity and complexity risk rather than assuming solely credit risk. The deep experience of the AAM investment team and Apollo's credit portfolio managers assists us in sourcing and underwriting complex asset classes. AAM has selected a diverse array of corporate bonds and more structured, but highly rated asset classes. We also maintain holdings in floating rate and less rate-sensitive instruments, including CLOs, non-agency RMBS and various types of structured products. In addition to our fixed income portfolio, we opportunistically allocate 5-10% of our portfolio to alternative investments where we primarily focus on fixed income-like, cash flow-based investments.

Our invested assets, which are those which directly back our policyholder liabilities as well as surplus assets (as previously discussed in *Key Operating and Non-GAAP Measures*), were $100.6 billion and $82.3 billion as of September 30, 2018 and December 31, 2017, respectively. AAM manages, directly and indirectly, $98.7 billion of investments, which in the aggregate constitute the vast majority of our investment portfolio as of September 30, 2018, comprising a diversified portfolio of fixed maturity and other securities. Through our relationship with Apollo, AAM has identified unique investment opportunities for us. AAM's knowledge of our funding structure and regulatory requirements allows it to design customized strategies and investments for our portfolio.

Our asset portfolio is managed within the limits and constraints set forth in our Investment and Credit Risk Policy. Under this policy, we set limits on investments in our portfolio by asset class, such as corporate bonds, emerging markets securities, municipal bonds, non-agency RMBS, CMBS, CLOs, commercial mortgage whole loans and mezzanine loans and investment funds. We also set credit risk limits for exposure to a single issuer that vary based on the issuer's ratings. In addition, our investment portfolio is constrained by its scenario-based capital ratio limit and its stressed liquidity limit.

The following table presents the carrying values of our total investments and investments in related parties:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Carrying Value	Percent of Total	Carrying Value	Percent of Total
Fixed maturity securities, at fair value				
AFS securities	$ 59,882	59.1%	$ 61,012	72.3%
Trading securities	1,977	2.0%	2,196	2.6%
Equity securities	292	0.3%	790	0.9%
Mortgage loans, net of allowances	8,982	8.9%	6,233	7.4%
Investment funds	692	0.7%	699	0.8%
Policy loans	512	0.5%	530	0.6%
Funds withheld at interest	7,841	7.7%	7,085	8.4%
Derivative assets	2,515	2.5%	2,551	3.0%
Real estate	—	—%	624	0.7%
Short-term investments	234	0.2%	201	0.2%
Other investments	114	0.1%	133	0.2%
Total investments	83,041	82.0%	82,054	97.1%
Investment in related parties				
Fixed maturity securities, at fair value				
AFS securities	1,243	1.2%	406	0.5%
Trading securities	259	0.3%	307	0.4%
Mortgage loans	389	0.3%	—	—%
Investment funds	2,093	2.1%	1,310	1.6%
Funds withheld at interest	13,963	13.7%	—	—%
Short-term investments	10	0.0%	52	0.1%
Other investments	386	0.4%	238	0.3%
Total related party investments	18,343	18.0%	2,313	2.9%
Total investments, including related party	$ 101,384	100.0%	$ 84,367	100.0%

The increase in our total investments, including related party, as of September 30, 2018 of $17.0 billion compared to December 31, 2017 was mainly driven by $18.0 billion of assets at inception from the Voya reinsurance transactions, growth from organic deposits of $8.0 billion less liability outflows of $5.7 billion, investment of the proceeds from our debt issuance in January 2018 and reinvestment of earnings. These were partially offset by the deconsolidation of $5.9 billion related to our former German operations and the change in unrealized gains and losses on AFS securities. Unrealized gains and losses on AFS securities decreased $2.3 billion attributed to the increase in U.S. treasury rates and credit spreads widening.

Our investment portfolio consists largely of high quality fixed maturity securities, loans and short-term investments, as well as additional opportunistic holdings in investment funds and other instruments, including a small amount of equity holdings. Fixed maturity securities and loans include publicly issued corporate bonds, government and other sovereign bonds, privately placed corporate bonds and loans, mortgage loans, CMBS, RMBS, CLOs, and other asset-backed securities (ABS).

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

While the substantial majority of our investment portfolio has been allocated to corporate bonds and structured credit products, a key component of our investment strategy is the opportunistic acquisition of investment funds with attractive risk and return profiles. Our investment fund portfolio consists of funds that employ various strategies including real estate and other real asset funds, credit funds, private equity funds and hedge funds. We have a strong preference for assets that have some or all of the following characteristics, among others: (1) investments that constitute a direct investment or an investment in a fund with a high degree of co-investment; (2) investments with credit- or debt-like characteristics (for example, a stipulated maturity and par value), or alternatively, investments with reduced volatility when compared to pure equity; or (3) investments that have less downside risk. We acquired certain investment funds from AAA Investor (which are classified as private equity investments and consolidated VIEs) as a one-time capital contribution by our largest shareholder in advance of the Aviva USA acquisition. With respect to investment fund portfolios that we received in these transactions, we actively reinvest these investments in our preferred credit-oriented strategies over time as we liquidate these holdings.

We hold derivatives for economic hedging purposes to reduce our exposure to the cash flow variability of assets and liabilities, equity market risk, interest rate risk, credit risk, and to a lesser extent, foreign exchange risk. Our primary use of derivative instruments relates to providing the income needed to fund the annual indexed credits on our FIA products. We primarily use fixed indexed options to economically hedge FIA products that guarantee the return of principal to the policyholder and credit interest based on a percentage of the gain in a specific market index.

With respect to derivative positions, we transact with highly rated counterparties, and do not expect the counterparties to fail to meet their obligations under the contracts. We generally use industry standard agreements and annexes with bilateral collateral provisions to further reduce counterparty credit exposure.

AFS Securities

We invest with the intent to hold investments to maturity. In selecting investments we attempt to source investments that match our future cash flow needs. However, we may sell any of our investments in advance of maturity in order to timely satisfy our liabilities as they become due or in order to respond to a change in the credit profile or other characteristics of the particular investment.

AFS fixed maturity securities are carried at fair value on our condensed consolidated balance sheets. Changes in fair value for our AFS portfolio, net of related DAC, DSI and VOBA amortization and the change in rider reserves, are charged or credited to other comprehensive income, net of tax. Declines in fair value that are other than temporary are recorded as realized losses in the condensed consolidated statements of income, net of any applicable non-credit component of the loss, which is recorded as an adjustment to other comprehensive income.

The distribution of our AFS securities, including related parties, by type is as follows:

	September 30, 2018				
(In millions, except percentages)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Percent of Total
AFS securities					
U.S. government and agencies	$ 143	$ —	$ (1)	$ 142	0.2%
U.S. state, municipal and political subdivisions	1,142	103	(8)	1,237	2.0%
Foreign governments	180	3	(3)	180	0.3%
Corporate	37,819	447	(947)	37,319	61.1%
CLO	5,325	15	(38)	5,302	8.7%
ABS	4,869	29	(43)	4,855	8.0%
CMBS	2,343	29	(48)	2,324	3.8%
RMBS	7,923	610	(10)	8,523	13.9%
Total AFS securities	59,744	1,236	(1,098)	59,882	98.0%
AFS securities – related party					
CLO	612	1	(4)	609	1.0%
ABS	638	1	(5)	634	1.0%
Total AFS securities – related party	1,250	2	(9)	1,243	2.0%
Total AFS securities, including related party	$ 60,994	$ 1,238	$ (1,107)	$ 61,125	100.0%

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	December 31, 2017				
(In millions, except percentages)	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Percent of Total
Fixed maturity securities					
U.S. government and agencies	$ 63	$ 1	$ (2)	$ 62	0.1%
U.S. state, municipal and political subdivisions	996	171	(2)	1,165	1.9%
Foreign governments	2,575	116	(8)	2,683	4.3%
Corporate	35,173	1,658	(171)	36,660	59.5%
CLO	5,039	53	(8)	5,084	8.2%
ABS	3,945	53	(27)	3,971	6.4%
CMBS	1,994	48	(21)	2,021	3.3%
RMBS	8,721	652	(7)	9,366	15.2%
Total fixed maturity securities	58,506	2,752	(246)	61,012	98.9%
Equity securities[1]	271	7	(1)	277	0.4%
Total AFS securities	58,777	2,759	(247)	61,289	99.3%
AFS securities – related party					
CLO	353	7	—	360	0.6%
ABS	46	—	—	46	0.1%
Total AFS securities – related party	399	7	—	406	0.7%
Total AFS securities, including related party	$ 59,176	$ 2,766	$ (247)	$ 61,695	100.0%

[1] *Included in equity securities on the condensed consolidated balance sheets.*

Fixed Maturity Securities

We maintain a diversified AFS portfolio of corporate fixed maturity securities across industries and issuers, and a diversified portfolio of structured securities. The composition of our AFS fixed maturity securities, including related parties, is as follows:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Fair Value	Percent of Total	Fair Value	Percent of Total
Corporate				
Industrial other[1]	$ 11,773	19.3%	$ 12,026	19.6%
Financial	12,030	19.7%	11,824	19.3%
Utilities	8,967	14.7%	8,296	13.5%
Communication	2,351	3.8%	2,607	4.2%
Transportation	2,198	3.6%	1,907	3.1%
Total corporate	37,319	61.1%	36,660	59.7%
Other government-related securities				
U.S. state, municipal and political subdivisions	1,237	2.0%	1,165	1.9%
Foreign governments	180	0.3%	2,683	4.4%
U.S. government and agencies	142	0.2%	62	0.1%
Total non-structured securities	38,878	63.6%	40,570	66.1%
Structured securities				
CLO	5,911	9.7%	5,444	8.9%
ABS	5,489	9.0%	4,017	6.5%
CMBS	2,324	3.8%	2,021	3.3%
RMBS				
Agency	100	0.1%	87	0.1%
Non-agency	8,423	13.8%	9,279	15.1%
Total structured securities	22,247	36.4%	20,848	33.9%
Total AFS fixed maturity securities, including related party	$ 61,125	100.0%	$ 61,418	100.0%

[1] *Includes securities within various industry segments including capital goods, basic industry, consumer cyclical, consumer non-cyclical, industrial and technology.*

The fair value of our total AFS fixed maturity securities, including related parties, was $61.1 billion and $61.4 billion as of September 30, 2018 and December 31, 2017, respectively. The decrease was mainly driven by the deconsolidation of our former German operations and the change in unrealized gains and losses on AFS securities. Unrealized gains and losses on AFS securities decreased attributed to the increase in U.S. treasury rates and credit spreads widening. These were partially offset by strong growth in deposits over liability outflows, assets from the Voya reinsurance transactions and the investment of the proceeds from our debt issuance in January 2018.

The Securities Valuation Office (SVO) of the NAIC is responsible for the credit quality assessment and valuation of securities owned by state regulated insurance companies. Insurance companies report ownership of securities to the SVO when such securities are eligible for filing on the relevant schedule of the NAIC Financial Statement Blank. The SVO conducts credit analysis on these securities for the purpose of assigning an NAIC designation and/or unit price. With important exceptions discussed below, if a security has been rated by a Nationally Recognized Statistical Rating Organization (NRSRO), the SVO utilizes that rating and assigns an NAIC designation based upon the following system:

NAIC designation	NRSRO equivalent rating
1	AAA/AA/A
2	BBB
3	BB
4	B
5	CCC
6	CC and lower

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The NRSRO ratings methodology is focused on the likelihood of recovery of all contractual payments, including principal at par, regardless of an investor's carrying value. In effect, the NRSRO rating assumes that the holder is the original purchaser at par. In contrast, the SVO's loan-backed and structured securities (LBaSS) methodology is focused on determining the risk associated with the recovery of the amortized cost of each security. Because the NAIC's methodology explicitly considers amortized cost and the likelihood of recovery of our investment, we view the NAIC's methodology as the most appropriate way to view our fixed maturity portfolio for purposes of evaluating credit quality since a large portion of our holdings were purchased and are carried at significant discounts to par.

Specific to LBaSS, the SVO has developed a ratings process and provides instruction on both modeled and non-modeled LBaSS. The modeled LBaSS process is specific to the non-agency RMBS and CMBS asset classes. In order to establish ratings at the individual security level, the SVO obtains loan-level analysis of each RMBS and CMBS using a selected vendor's proprietary financial model. The SVO ensures that the vendor has extensive internal quality-control processes in place and the SVO conducts its own quality-control checks of the selected vendor's valuation process. The SVO has retained the services of Blackrock to model non-agency RMBS and CMBS owned by U.S. insurers for all years presented herein. Blackrock provides five prices (breakpoints), based on each U.S. insurer's statutory book value price, to utilize in determining the NAIC designation for each modeled LBaSS. For non-modeled LBaSS (including ABS and CLOs) with the initial designation of NAIC 1 or NAIC 6, the designation remains the same through the life of the security. For non-modeled LBaSS with the initial designation of NAIC 2 through NAIC 5, the selected vendors are not utilized and the NAIC designations are set using a standardized table of breakpoints provided by the SVO for application to the insurer's statutory book value price. The NAIC designation determines the associated level of RBC that an insurer is required to hold for modeled LBaSS owned by the insurer. In general, under both the modeled and non-modeled LBaSS processes, the larger the discount to par value, the stronger the NAIC designation the LBaSS will have.

A summary of our AFS fixed maturity securities, including related parties, by NAIC designation (with our former German operations applying NRSRO ratings to map to NAIC designations) is as follows:

	September 30, 2018			December 31, 2017		
(In millions, except percentages)	Amortized Cost	Fair Value	Percent of Total	Amortized Cost	Fair Value	Percent of Total
NAIC designation						
1	$ 30,761	$ 31,245	51.1%	$ 30,906	$ 32,447	52.8%
2	26,503	26,206	42.9%	24,147	25,082	40.9%
Total investment grade	57,264	57,451	94.0%	55,053	57,529	93.7%
3	2,855	2,822	4.6%	2,978	3,040	5.0%
4	674	648	1.1%	789	765	1.2%
5	193	194	0.3%	70	66	0.1%
6	8	10	0.0%	15	18	0.0%
Total below investment grade	3,730	3,674	6.0%	3,852	3,889	6.3%
Total fixed maturity securities, including related party	$ 60,994	$ 61,125	100.0%	$ 58,905	$ 61,418	100.0%

Substantially all of our AFS fixed maturity portfolio, 94.0% and 93.7% as of September 30, 2018 and December 31, 2017, respectively, was invested in assets considered investment grade with a NAIC designation of 1 or 2.

A summary of our AFS fixed maturity securities, including related parties, by NRSRO ratings is set forth below:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Fair Value	Percent of Total	Fair Value	Percent of Total
NRSRO rating agency designation				
AAA/AA/A	$ 21,212	34.7%	$ 21,448	34.9%
BBB	23,860	39.0%	23,572	38.4%
Non-rated[1]	7,035	11.5%	6,592	10.7%
Total investment grade	52,107	85.2%	51,612	84.0%
BB	2,835	4.7%	3,091	5.0%
B	1,036	1.7%	1,198	2.0%
CCC	2,951	4.8%	2,696	4.4%
CC and lower	1,435	2.4%	2,302	3.8%
Non-rated[1]	761	1.2%	519	0.8%
Total below investment grade	9,018	14.8%	9,806	16.0%
Total fixed maturity securities, including related party	$ 61,125	100.0%	$ 61,418	100.0%

[1] *Securities denoted as non-rated by the NRSRO were classified as investment or non-investment grade according to the security's respective NAIC designation.*

Consistent with the NAIC Process and Procedures Manual, an NRSRO rating was assigned based on the following criteria: (a) the equivalent S&P rating when the security is rated by one NRSRO; (b) the equivalent S&P rating of the lowest NRSRO when the security is rated by two NRSROs; and (c) the equivalent S&P rating of the second lowest NRSRO when the security is rated by three or more NRSROs. If the lowest two NRSRO ratings are equal, then such rating will be the assigned rating. NRSRO ratings available for the periods presented were S&P, Fitch, Moody's Investor Service (Moody's), DBRS, and Kroll Bond Rating Agency, Inc. (KBRA).

The portion of our AFS fixed maturity portfolio that was considered below investment grade based on NRSRO ratings was 14.8% and 16.0% as of September 30, 2018 and December 31, 2017, respectively. The primary driver of the difference in the percentage of securities considered below investment grade by NRSROs as compared to the securities considered below investment grade by the NAIC relates to the difference in methodologies between the NRSRO and NAIC for RMBS due to investments acquired at a discount to par value, as discussed above.

As of September 30, 2018 and December 31, 2017, the non-rated securities shown above were comprised of 46% and 44%, respectively, of corporate private placement securities for which we have not sought individual ratings from the NRSROs and 36% and 42%, respectively, of RMBS, many of which were acquired at a significant discount to par. We rely on internal analysis of credit risk and designations assigned by the NAIC. As of September 30, 2018 and December 31, 2017, 90% and 93%, respectively, of the non-rated securities were designated NAIC 1 or 2.

Asset-backed Securities – We invest in ABS which are securitized by pools of assets such as consumer loans, automobile loans, student loans, insurance-linked securities, operating cash flows of corporations and cash flows from various types of business equipment. These holdings were $5.5 billion and $4.0 billion as of September 30, 2018 and December 31, 2017, respectively. The increase in ABS is mainly due to attractive opportunities invested in during the year as new deposits and the Voya investment portfolio are deployed. As of September 30, 2018 and December 31, 2017, our ABS portfolio included $5.1 billion (92% of the total) and $3.8 billion (94% of the total), respectively, of securities that are considered investment grade based on NAIC designations, while $4.8 billion (88% of the total) and $3.6 billion (89% of the total), respectively, of securities were considered investment grade based on NRSRO ratings.

Collateralized Loan Obligations – We also invest in CLOs which pay principal and interest from cash flows received from underlying corporate loans. These holdings were $5.9 billion and $5.4 billion as of September 30, 2018 and December 31, 2017, respectively. As of September 30, 2018 and December 31, 2017, our CLO portfolio included $5.4 billion (91% of the total) and $4.6 billion (85% of the total), respectively, of securities that are considered investment grade based on NAIC designations, while $5.7 billion (96% of the total) and $4.8 billion (88% of the total), respectively, of securities were considered investment grade based on NRSRO ratings.

Commercial Mortgage-backed Securities – A portion of our fixed maturity AFS portfolio is invested in CMBS. CMBS are constructed from pools of commercial mortgages. These holdings were $2.3 billion and $2.0 billion as of September 30, 2018 and December 31, 2017, respectively. As of September 30, 2018 and December 31, 2017, our CMBS portfolio included $2.1 billion (90% of the total) and $1.9 billion (95% of the total), respectively, of securities that are considered investment grade based on NAIC designations, while $1.5 billion (65% of the total) and $1.4 billion (70% of the total), respectively, of securities were considered investment grade based on NRSRO ratings.

Residential Mortgage-backed Securities – As part of our core investment strategy, a portion of our fixed maturity AFS portfolio is invested in RMBS. RMBS are securities constructed from pools of residential mortgages and backed by payments from those pools. These holdings were $8.5 billion and $9.4 billion as of September 30, 2018 and December 31, 2017, respectively. Excluding limitations on access to lending and other extraordinary economic conditions, prepayments of principal on the underlying loans can be expected to accelerate with decreases in market interest rates and diminish with increases in interest rates. Our investments in RMBS are primarily non-agency RMBS having a significant focus on assets with attractive entry prices, which are generally considered investment grade based on NAIC designations, given the likelihood that we ultimately receive principal and interest distributions in an amount at least equal to our amortized cost.

A summary of our AFS RMBS portfolio by NAIC designations and NRSRO quality ratings is as follows:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Fair Value	Percent of Total	Fair Value	Percent of Total
NAIC designation				
1	$ 7,837	92.0%	$ 8,714	93.0%
2	358	4.2%	360	3.8%
Total investment grade	8,195	96.2%	9,074	96.8%
3	211	2.5%	213	2.3%
4	114	1.3%	73	0.8%
5	1	0.0%	6	0.1%
6	2	0.0%	—	—%
Total below investment grade	328	3.8%	292	3.2%
Total RMBS	$ 8,523	100.0%	$ 9,366	100.0%
NRSRO rating agency designation				
AAA/AA/A	$ 511	6.0%	$ 335	3.6%
BBB	249	2.9%	347	3.7%
Non-rated[1]	2,630	30.8%	2,866	30.6%
Total investment grade	3,390	39.7%	3,548	37.9%
BB	338	4.0%	415	4.4%
B	356	4.2%	417	4.5%
CCC	2,862	33.6%	2,580	27.5%
CC and lower	1,432	16.8%	2,298	24.5%
Non-rated[1]	145	1.7%	108	1.2%
Total below investment grade	5,133	60.3%	5,818	62.1%
Total RMBS	$ 8,523	100.0%	$ 9,366	100.0%

[1] *Securities denoted as non-rated by the NRSRO were classified as investment or non-investment grade according to the security's respective NAIC designations.*

A significant majority of our RMBS portfolio, 96.2% and 96.8% as of September 30, 2018 and December 31, 2017, respectively, was invested in assets considered to be investment grade based upon an application of the NAIC's methodology to our holdings of RMBS. The NAIC's methodology with respect to RMBS gives explicit effect to the amortized cost at which an insurance company carries each such investment. Because we invested in RMBS after the stresses related to U.S. housing had caused significant downward pressure on prices of RMBS, we carry most of our investments in RMBS at significant discounts to par value, which results in an investment grade NAIC designation. In contrast, our understanding is that in setting ratings, NRSROs focus on the likelihood of recovery of all contractual payments including principal at par value. As a result of a fundamental difference in approach, as of September 30, 2018 and December 31, 2017, NRSROs characterized 39.7% and 37.9%, respectively, of our RMBS as investment grade.

Unrealized Losses

Our investments in fixed maturity securities, including related parties, are reported at fair value with changes in fair value recorded in other comprehensive income. Certain of our fixed maturity securities, including related parties, have experienced declines in fair value that we consider temporary in nature. As of September 30, 2018, our fixed maturity securities, including related party, had a fair value of $61.1 billion, which was 0.2% above amortized cost of $61.0 billion. As of December 31, 2017, our fixed maturity securities, including related party, had a fair value of $61.4 billion, which was 4.3% above amortized cost of $58.9 billion. These investments are held to support our product liabilities and we currently have the intent and ability to hold these securities until sale or maturity, and believe the securities will recover the amortized cost basis prior to sale or maturity.

The following tables reflect the unrealized losses on the AFS fixed maturity portfolio, including related parties, by NAIC designations:

	September 30, 2018					
(In millions, except percentages)	Amortized Cost of Securities with Unrealized Loss	Gross Unrealized Losses	Fair Value of Securities with Unrealized Loss	Fair Value to Amortized Cost Ratio	Fair Value of Total AFS Fixed Maturity Securities	Percent of Loss to Total AFS Fair Value NAIC Designation
NAIC designation						
1	$ 14,638	$ (401)	$ 14,237	97.3%	$ 31,245	(1.3)%
2	16,278	(602)	15,676	96.3%	26,206	(2.3)%
Total investment grade	30,916	(1,003)	29,913	96.8%	57,451	(1.7)%
3	1,734	(63)	1,671	96.4%	2,822	(2.2)%
4	540	(40)	500	92.6%	648	(6.2)%
5	46	(1)	45	97.8%	194	(0.5)%
6	2	—	2	100.0%	10	— %
Total below investment grade	2,322	(104)	2,218	95.5%	3,674	(2.8)%
Total	$ 33,238	$ (1,107)	$ 32,131	96.7%	$ 61,125	(1.8)%

	December 31, 2017					
(In millions, except percentages)	Amortized Cost of Securities with Unrealized Loss	Gross Unrealized Losses	Fair Value of Securities with Unrealized Loss	Fair Value to Amortized Cost Ratio	Fair Value of Total AFS Fixed Maturity Securities	Percent of Loss to Total AFS Fair Value NAIC Designation
NAIC designation						
1	$ 4,901	$ (100)	$ 4,801	98.0%	$ 32,447	(0.3)%
2	4,284	(82)	4,202	98.1%	25,082	(0.3)%
Total investment grade	9,185	(182)	9,003	98.0%	57,529	(0.3)%
3	881	(19)	862	97.8%	3,040	(0.6)%
4	451	(40)	411	91.1%	765	(5.2)%
5	60	(5)	55	91.7%	66	(7.6)%
6	5	—	5	100.0%	18	— %
Total below investment grade	1,397	(64)	1,333	95.4%	3,889	(1.6)%
Total	$ 10,582	$ (246)	$ 10,336	97.7%	$ 61,418	(0.4)%

The gross unrealized losses on AFS fixed maturity securities, including related party, were $1.1 billion and $246 million as of September 30, 2018 and December 31, 2017, respectively. The increase in unrealized losses was driven by the increase in U.S. treasury rates and credit spreads widening for the nine months ended September 30, 2018.

As of September 30, 2018 and December 31, 2017, we held $4.5 billion and $4.4 billion, respectively, in energy sector fixed maturity securities, or 7% of total AFS fixed maturity securities, including related party, as of each period. The gross unrealized capital losses on these securities were $112 million and $33 million, or 10% and 13%, respectively, of the total unrealized losses as of September 30, 2018 and December 31, 2017, respectively.

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Other-Than-Temporary Impairments

For our OTTI policy and the identification of securities that could potentially have impairments, see *Note 1 – Business, Basis of Presentation and Significant Accounting Policies* and *Note 2 – Investments* to the condensed consolidated financial statements, as well as *Critical Accounting Estimates and Judgments.*

During the nine months ended September 30, 2018 and 2017, we recorded $6 million and $25 million, respectively of OTTI losses primarily related to corporate fixed maturities. The annualized OTTI losses we have experienced for the nine months ended September 30, 2018 and 2017 translate into 1 basis point and 4 basis points, respectively, of average invested assets.

International Exposure

A portion of our fixed maturity securities is invested in securities with international exposure. As of September 30, 2018 and December 31, 2017, 30% and 33% of the carrying value of our fixed maturity securities, including related parties, was comprised of securities of issuers based outside of the United States and debt securities of foreign governments. These securities are either denominated in U.S. dollars or do not expose us to significant foreign currency risk as a result of foreign currency swap arrangements.

The following table presents our international exposure in our fixed maturity securities portfolio, including related parties, by country or region:

	September 30, 2018			December 31, 2017		
(In millions, except percentages)	Amortized Cost	Fair Value	Percent of Total	Amortized Cost	Fair Value	Percent of Total
Country of risk						
Ireland	$ 526	$ 513	2.8%	$ 498	$ 511	2.6%
Italy	36	36	0.2%	59	64	0.3%
Spain	62	62	0.3%	209	225	1.1%
Portugal	—	—	—%	1	1	0.0%
Total Ireland, Italy, Greece, Spain and Portugal[1]	624	611	3.3%	767	801	4.0%
Other Europe	6,244	6,145	33.4%	8,087	8,395	42.0%
Total Europe	6,868	6,756	36.7%	8,854	9,196	46.0%
Non-U.S. North America	9,011	8,980	48.7%	8,048	8,220	41.2%
Australia & New Zealand	1,721	1,682	9.1%	1,443	1,481	7.4%
Central & South America	434	437	2.4%	481	508	2.6%
Africa & Middle East	227	225	1.2%	193	196	1.0%
Asia/Pacific	360	352	1.9%	321	327	1.6%
Supranational	—	—	—%	39	41	0.2%
Total	$ 18,621	$ 18,432	100.0%	$ 19,379	$ 19,969	100.0%

[1] *As of each of the respective periods, we had no holdings in Greece.*

Approximately 93.1% and 90.9% of these securities are investment grade by NAIC designation as of September 30, 2018 and December 31, 2017, respectively. As of September 30, 2018, 9% of our fixed maturity securities, including related parties, were invested in CLOs of Cayman Islands issuers (for which underlying investments are largely loans to U.S. issuers) and 21% were invested in securities of non-U.S. issuers.

Portugal, Ireland, Italy, Greece and Spain continue to represent credit risk as economic conditions in these countries continue to be volatile, especially within the financial and banking sectors. We had $611 million and $801 million as of September 30, 2018 and December 31, 2017, respectively, of exposure in these countries.

As of September 30, 2018, we held United Kingdom and Channel Islands fixed maturity securities of $2.3 billion, or 3.7% of the total fixed maturities including related parties. As of September 30, 2018, these securities were in an unrealized loss position of $71 million. Our investment managers analyze each holding for credit risk by economic and other factors of each country and industry.

Trading Securities

Trading securities, including related parties, were $2.2 billion and $2.5 billion as of September 30, 2018 and December 31, 2017, respectively. Trading securities are primarily comprised of AmerUs Closed Block securities for which we have elected the fair value option valuation, CLO equity tranche securities, structured securities with embedded derivatives, and investments which support various reinsurance arrangements.

Mortgage Loans

The following is a summary of our mortgage loan portfolio by collateral type:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Net Carrying Value	Percent of Total	Net Carrying Value	Percent of Total
Property type				
Office building	$ 2,168	23.1%	$ 1,187	19.0%
Retail	1,693	18.1%	1,223	19.6%
Hotels	893	9.5%	928	14.9%
Industrial	833	8.9%	944	15.2%
Apartment	684	7.3%	525	8.4%
Other commercial[1]	399	4.3%	440	7.1%
Total net commercial mortgage loans	6,670	71.2%	5,247	84.2%
Residential loans	2,701	28.8%	986	15.8%
Total mortgage loans, net of allowances	$ 9,371	100.0%	$ 6,233	100.0%

[1] *Other commercial loans include investments in nursing homes, other healthcare institutions, parking garages, storage facilities and other commercial properties.*

We invest a portion of our investment portfolio in mortgage loans, which are generally comprised of high quality commercial first lien and mezzanine real estate loans. Our mortgage loan holdings were $9.4 billion and $6.2 billion as of September 30, 2018 and December 31, 2017, respectively. This included $2.0 billion and $1.8 billion of mezzanine mortgage loans as of September 30, 2018 and December 31, 2017, respectively. The increase in mortgage loans is mainly driven by an increase in RML purchases during the year, purchases of triple net leases and the addition of mortgage loans from the Voya reinsurance transaction. We have acquired mortgage loans through acquisitions and reinsurance arrangements, as well as through an active program to invest in new mortgage loans. We invest in mortgage loans on income producing properties including hotels, apartments, retail and office buildings, and other commercial and industrial properties. Loan-to-value ratios at the time of loan approval are generally 75% or less.

Our mortgage loans are primarily stated at unpaid principal balance, adjusted for any unamortized premium or discount, and net of valuation allowances. Interest income is accrued on the principal amount of the loan based on the loan's contractual interest rate. Amortization of premiums and discounts is recorded using the effective interest method. Interest income, amortization of premiums and discounts, and prepayment fees are reported in net investment income.

It is our policy to cease to accrue interest on loans that are over 90 days delinquent. For loans less than 90 days delinquent, interest is accrued unless it is determined that the accrued interest is not collectible. If a loan becomes over 90 days delinquent, it is our general policy to initiate foreclosure proceedings unless a workout arrangement to bring the loan current is in place. As of September 30, 2018, we had $43 million of mortgage loans that were 90 days past due, of which $13 million in the process of foreclosure. As of December 31, 2017, we had $28 million of mortgage loans that were 90 days past, of which $1 million in the process of foreclosure.

See *Note 2 – Investments* to the condensed consolidated financial statements for information regarding valuation allowance for collection loss, impairments, loan-to-value, and debt service coverage.

As of September 30, 2018 and December 31, 2017, we had not recorded any new specific loan valuation allowances. For the nine months ended September 30, 2018 and 2017, we recorded $0 million and $5 million, respectively, of impairments through net income. We have established a general and specific loan valuation allowance in the aggregate amount of $1 million and $2 million as of September 30, 2018 and December 31, 2017, respectively.

Investment Funds and Variable Interest Entities

Our investment funds investment strategy primarily focuses on funds with core holdings of credit assets, real assets, real estate, preferred equity and income producing assets. Our investment strategy focuses on sourcing assets with some or all of the following characteristics, among others: (1) investments that constitute a direct investment or an investment in a fund with a high degree of co-investment; (2) investments with credit- or debt-like characteristics (for example, a stipulated maturity and par value), or alternatively, investments with reduced volatility when compared to pure equity; or (3) investments that have less downside risk. A portion of our current investment funds and VIE holdings are comprised of certain investment funds contributed by the AAA Investor (AAA Contribution) as further described in *Note 4 – Variable Interest Entities* to the condensed consolidated financial statements. At the time of the AAA Contribution, the contributed assets largely consisted of co-investments with Apollo private equity funds. However, the attributes of the contributed assets have changed significantly since the initial transaction primarily due to the initial public offering of two underlying fund investment holdings. As of September 30, 2018, the assets consisted of $151 million of publicly-traded equity securities, a substantial portion of which is in the process of being liquidated. These public equity securities have resulted in volatility in our statement of income in recent periods.

Our investment funds generally meet the definition of a VIE, and in certain cases these investment funds are consolidated in our financial statements because we meet the criteria of the primary beneficiary. See *Note 4 – Variable Interest Entities* to the condensed consolidated financial statements for further discussion on our investment funds that meet the criteria for consolidation and the accounting treatment for them.

The following table illustrates our consolidated VIE positions:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Carrying Value	Percent of Total	Carrying Value	Percent of Total
Assets of consolidated VIEs				
Investments				
Fixed maturity securities				
Trading securities	$ 48	5.8%	$ 48	5.5%
Equity securities	176	21.1%	240	27.8%
Investment funds	605	72.7%	571	66.1%
Cash and cash equivalents	2	0.2%	4	0.5%
Other assets	2	0.2%	1	0.1%
Total assets of consolidated VIEs	$ 833	100.0%	$ 864	100.0%
Liabilities of consolidated VIEs				
Other liabilities	$ 2	100.0%	$ 2	100.0%
Total liabilities of consolidated VIEs	$ 2	100.0%	$ 2	100.0%

The assets of consolidated VIEs were $833 million and $864 million as of September 30, 2018 and December 31, 2017, respectively. The liabilities of consolidated VIEs were $2 million as of both September 30, 2018 and December 31, 2017.

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The following table illustrates our investment funds, including related party positions of our non-consolidated VIEs and investment funds owned by consolidated VIEs:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Carrying Value	Percent of Total	Carrying Value	Percent of Total
Investment funds				
Private equity	$ 254	7.5%	$ 271	10.5%
Real estate and other real assets	205	6.0%	161	6.2%
Natural resources	4	0.1%	4	0.2%
Hedge funds	50	1.5%	61	2.4%
Credit funds	179	5.3%	202	7.8%
Total investment funds	692	20.4%	699	27.1%
Investment funds – related parties				
Private equity – A-A Mortgage	449	13.3%	403	15.6%
Private equity – other	680	20.1%	180	7.0%
Real estate and other real assets	499	14.7%	297	11.5%
Natural resources	95	2.8%	74	2.9%
Hedge funds	98	2.9%	93	3.6%
Credit funds	272	8.0%	263	10.2%
Total investment funds – related parties	2,093	61.8%	1,310	50.8%
Investment funds owned by consolidated VIEs				
Private equity – MidCap	549	16.2%	528	20.4%
Credit funds	1	0.0%	21	0.8%
Real estate and other real assets	55	1.6%	22	0.9%
Total investment funds owned by consolidated VIEs	605	17.8%	571	22.1%
Total investment funds, including related parties and funds owned by consolidated VIEs	$ 3,390	100.0%	$ 2,580	100.0%

Overall, the total investment funds, including related party and consolidated VIEs, were $3.4 billion and $2.6 billion as of September 30, 2018 and December 31, 2017, respectively. See *Note 4 – Variable Interest Entities* to the condensed consolidated financial statements for further discussion regarding how we account for our investment funds. Our investment fund portfolio is subject to a number of market related risks including interest rate and equity market risk. Interest rate risk represents the potential for changes in the investment fund's net asset values resulting from changes in the general level of interest rates. Equity market risk represents potential for changes in the investment fund's net asset values resulting from changes in equity markets or from other external factors which influence equity markets. We actively monitor our exposure to the risks inherent in these investments which could materially and adversely affect our results of operations and financial condition. The interest rate and equity market risks expose us to potential volatility in our earnings period-over-period related to these investment funds.

Funds Withheld at Interest

Funds withheld at interest represents a receivable for amounts contractually withheld by ceding companies in accordance with modco and funds withheld reinsurance agreements in which we act as the reinsurer. Generally, assets equal to statutory reserves are withheld and legally owned by the ceding company. As of September 30, 2018, the significant majority of the ceding companies holding the assets pursuant to such reinsurance agreements had a financial strength rating of A- or better.

The funds withheld at interest is comprised of the host contract and an embedded derivative. We are subject to the investment performance on the withheld assets with the total return directly impacting the host contract and the embedded derivative. Interest accrues at a risk-free rate on the host receivable and is recorded as net investment income in the condensed consolidated statements of income. The change in the embedded derivative in our reinsurance agreements, which is similar to a total return swap on the income generated by the underlying assets held by the ceding companies, is recorded in investment related gains (losses). Although we do not directly control the underlying investments in the funds withheld at interest, in each instance the ceding company has hired AAM to manage the withheld assets in accordance with our investment guidelines.

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The following summarizes the underlying investment composition of the funds withheld at interest, including related party:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Carrying Value	Percent of Total	Carrying Value	Percent of Total
Fixed maturity securities				
U.S. government and agencies	$ 75	0.3 %	$ —	—%
U.S. state, municipal and political subdivisions	493	2.3 %	117	1.6%
Foreign governments	111	0.5 %	—	—%
Corporate	11,396	52.3 %	2,095	29.6%
CLO	987	4.5 %	669	9.4%
ABS	1,383	6.3 %	886	12.5%
CMBS	855	3.9 %	290	4.1%
RMBS	1,807	8.3 %	1,551	21.9%
Equity securities	51	0.2 %	28	0.4%
Mortgage loans	3,588	16.5 %	792	11.2%
Investment funds	505	2.3 %	376	5.3%
Derivative assets	302	1.4 %	78	1.1%
Short-term investments	275	1.3 %	16	0.2%
Cash and cash equivalents	196	0.9 %	132	1.9%
Other assets and liabilities	(220)	(1.0)%	55	0.8%
Total funds withheld at interest, including related party	$ 21,804	100.0 %	$ 7,085	100.0%

As of September 30, 2018 and December 31, 2017, we held $21.8 billion and $7.1 billion, respectively, of funds withheld at interest receivables, including related party. The increase funds withheld at interest is mainly due to $14.7 billion of modco reinsurance agreements from the Voya reinsurance transaction. Approximately 95.3% and 94.2% of the fixed maturity securities within the funds withheld at interest are investment grade by NAIC designation as of September 30, 2018 and December 31, 2017, respectively.

Derivative Instruments

We hold derivative instruments for economic hedging purposes to reduce our exposure to cash flow variability of assets and liabilities, equity market risk, interest rate risk, credit risk and foreign exchange risk. The types of derivatives we may use include interest rate swaps, foreign currency swaps and forward contracts, total return swaps, credit default swaps, variance swaps, futures and fixed indexed options.

A presentation of our derivative instruments along with a discussion of the business strategy involved with our derivatives is included in *Note 3 – Derivative Instruments* to the condensed consolidated financial statements. This includes:

- a comprehensive description of the derivatives instruments as well as the strategies to manage risk;
- the notional amounts and estimated fair value by derivative instruments; and
- impacts on the condensed consolidated statement of net income.

As part of our risk management strategies, management continually evaluates our derivative instrument holdings and the effectiveness of such holdings in addressing risks identified in our operations.

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Invested Assets

The following summarizes our invested assets:

	September 30, 2018		December 31, 2017			
(In millions, except percentages)	Invested Asset Value[1]	Percent of Total	U.S. and Bermuda Invested Asset Value	Germany Invested Asset Value	Invested Asset Value[1]	Percent of Total
Corporate	$ 50,272	50.0%	$ 37,059	$ 1,536	$ 38,595	46.9%
CLO	6,873	6.8%	5,914	—	5,914	7.2%
Credit	57,145	56.8%	42,973	1,536	44,509	54.1%
RMBS	9,996	9.9%	10,532	—	10,532	12.8%
Mortgage loans	12,994	12.9%	6,858	165	7,023	8.5%
CMBS	3,251	3.2%	2,322	—	2,322	2.8%
Real estate held for investment	—	—%	—	625	625	0.8%
Real estate	26,241	26.0%	19,712	790	20,502	24.9%
ABS	7,206	7.2%	4,824	—	4,824	5.9%
Alternative investments	4,023	4.0%	3,692	137	3,829	4.6%
State, municipal, political subdivisions and foreign government	2,004	2.0%	1,347	2,411	3,758	4.5%
Unit-linked assets	—	—%	—	407	407	0.5%
Equity securities	353	0.4%	192	128	320	0.4%
Short-term investments	464	0.5%	228	—	228	0.3%
U.S. government and agencies	220	0.2%	29	35	64	0.1%
Other investments	14,270	14.3%	10,312	3,118	13,430	16.3%
Cash and equivalents	1,823	1.8%	2,504	296	2,800	3.4%
Policy loans and other	1,141	1.1%	761	296	1,057	1.3%
Total invested assets	$ 100,620	100.0%	$ 76,262	$ 6,036	$ 82,298	100.0%

[1] *See Key Operating and Non-GAAP Measures for the definition of invested assets.*

Our total invested assets were $100.6 billion and $82.3 billion as of September 30, 2018 and December 31, 2017, respectively. As of September 30, 2018, our total invested assets were mainly comprised of 50.0% of corporate securities, 27.1% of structured securities, 12.9% of mortgage loans and 4.0% of alternative investments. Corporate securities within our U.S. and Bermuda portfolio included $13.8 billion of private placements, which represented 14% of our total invested assets. The increase in total invested assets as of September 30, 2018 from December 31, 2017 was primarily driven by $17.7 billion of invested assets at inception from the Voya reinsurance transaction, strong growth in deposits over liability outflows, the deployment of our debt issuance in January 2018 and reinvestment of earnings, partially offset by the deconsolidation of our former Germany operations.

In managing our business we utilize invested assets as presented in the above table. Invested assets do not correspond to the total investments, including related parties, on our condensed consolidated balance sheets, as discussed previously in *–Key Operating and Non-GAAP Measures*. Invested assets represent the investments that directly back our policyholder liabilities and surplus assets. We believe this view of our portfolio provides a view of the assets for which we have economic exposure. We adjust the presentation for funds withheld and modco transactions to include or exclude the underlying investments based upon the contractual transfer of economic exposure to such underlying investments. We also deconsolidate any VIEs in order to show the net investment in the funds, which therefore are included in the alternative investments line above.

Invested assets is utilized by management to evaluate our investment portfolio. Invested asset figures are used in the computation of net investment earned rate, which allows us to analyze the profitability of our investment portfolio. Invested assets is also used in our risk management processes for asset purchases, product design and underwriting, stress scenarios, liquidity, and ALM.

Alternative Investments

The following summarizes our alternative investments:

	September 30, 2018		December 31, 2017	
(In millions, except percentages)	Invested Asset Value	Percent of Total	Invested Asset Value	Percent of Total
Credit funds	$ 651	16.2%	$ 784	20.4%
Private equity – MidCap	549	13.6%	528	13.8%
Private equity – A-A Mortgage (AmeriHome)	551	13.7%	496	12.9%
Private equity – other	785	19.5%	554	14.5%
Mortgage and real assets	949	23.6%	643	16.8%
Hedge funds	176	4.4%	467	12.2%
Public equities	119	3.0%	171	4.5%
Natural resources and other real assets	243	6.0%	186	4.9%
Total alternative investments	$ 4,023	100.0%	$ 3,829	100.0%

Alternative investments were $4.0 billion and $3.8 billion as of September 30, 2018 and December 31, 2017, respectively, representing 4.0% and 4.6% of our total invested assets portfolio as of September 30, 2018 and December 31, 2017, respectively.

Alternative investments do not correspond to total investment funds, including related parties and VIEs, on our condensed consolidated balance sheets. As discussed above in the invested assets section, we adjust the GAAP presentation for funds withheld and modco and de-consolidate VIEs. We also include CLO equity tranche securities in alternative investments due to their underlying characteristics and equity-like features.

Through our relationship with Apollo and AAM, we have indirectly invested in companies that meet the key characteristics we look for in alternative investments. Two of our largest alternative investments are in asset originators, MidCap and AmeriHome, both of which, from time to time, provide us with access to assets for our investment portfolio.

MidCap

Our equity investment in MidCap is held indirectly through CoInvest VII, of which MidCap constitutes substantially all the fund’s investments. MidCap is a commercial finance company that provides various financial products to middle-market businesses in multiple industries, primarily located in the U.S. MidCap primarily originates and invests in commercial and industrial loans, including senior secured corporate loans, working capital loans collateralized mainly by accounts receivable and inventory, senior secured loans collateralized by portfolios of commercial and consumer loans and related products and secured loans to highly capitalized pharmaceutical and medical device companies, and commercial real estate loans, including multifamily independent-living properties, assisted living, skilled nursing and medical office properties, warehouse, office building, hotel and other commercial use properties and multifamily properties. MidCap originates and acquires loans using borrowings under financing arrangements that it has in place with numerous financial institutions. MidCap’s earnings are primarily driven by the difference between the interest earned on its loan portfolio and the interest accrued under its outstanding borrowings. As a result, MidCap is primarily exposed to the credit risk of its loan counterparties and prepayment risk. Additionally, financial results are influenced by related levels of middle-market business investment and interest rates.

Our alternative investment in CoInvest VII is substantially comprised of its investment in MidCap, which had a carrying value of $549 million and $528 million as of September 30, 2018 and December 31, 2017, respectively. Our investment in CoInvest VII largely reflects any contributions to and distributions from CoInvest VII and the fair value of MidCap. CoInvest VII returned a net investment earned rate of 18.23% and 8.15% for the three months ended September 30, 2018 and 2017, respectively, and 14.86% and 9.33% for the nine months ended September 30, 2018 and 2017, respectively. Alternative investment income from CoInvest VII was $25 million and $11 million for the three months ended September 30, 2018 and 2017, respectively, and $62 million and $39 million for the nine months ended September 30, 2018 and 2017, respectively. The increase in alternative investment income for both periods was driven by a favorable valuation adjustment, higher loan volumes and increased assets under management.

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AmeriHome

Our equity investment in AmeriHome is held indirectly through A-A Mortgage, of which AmeriHome is currently the fund's only investment. AmeriHome is a mortgage origination platform and an aggregator of mortgage servicing rights. AmeriHome acquires mortgage loans from retail originators and re-sells the loans to the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association and other investors. AmeriHome retains the mortgage servicing rights on the loans that it sells and employs a subservicer to perform servicing operations, including payment collection. AmeriHome's earnings are primarily driven by two sources: gains or losses on the sale of mortgage loans and the difference between the fee that it charges for mortgage servicing and the fee charged by the subservicer. As a result, AmeriHome's financial results are influenced by interest rates and related housing demand. AmeriHome is primarily exposed to credit risk related to the accuracy of the representations and warranties in the loans that AmeriHome acquires and prepayment risk, which prematurely terminates fees related to mortgage servicing.

Our alternative investment in A-A Mortgage had a carrying value of $551 million and $496 million as of September 30, 2018 and December 31, 2017, respectively. Our investment in A-A Mortgage represents our proportionate share of its net asset value, which largely reflects any contributions to and distributions from A-A Mortgage and the fair value of AmeriHome. A-A Mortgage returned a net investment earned rate of 14.66% and 6.77% for the three months ended September 30, 2018 and 2017, respectively, and 13.52% and 13.59% for the nine months ended September 30, 2018 and 2017, respectively. Alternative investment income from A-A Mortgage was $21 million and $8 million for the three months ended September 30, 2018 and 2017, respectively, and $55 million and $48 million for the nine months ended September 30, 2018 and 2017, respectively. The increase in alternative investment income for the three months ended September 30, 2018 compared to 2017 was driven by 2017 experiencing a decrease in market value of mortgage service rights related to the increased competitive environment and tighter spreads.

Non-GAAP Measure Reconciliations

The reconciliations to the nearest GAAP measure for adjusted operating income is included in the *Consolidated Results of Operations* section.

The reconciliation of shareholders' equity to adjusted shareholders' equity, which is included in adjusted book value per share, adjusted debt to capital ratio, adjusted ROE and adjusted operating ROE is as follows:

(In millions)	September 30, 2018	December 31, 2017
Total shareholders' equity	$ 9,069	$ 9,208
Less: AOCI	43	1,415
Less: Accumulated reinsurance unrealized gains and losses	(31)	161
Total adjusted shareholders' equity	$ 9,057	$ 7,632
Segment adjusted shareholders' equity		
Retirement Services	$ 7,105	$ 5,304
Corporate and Other	1,952	2,328
Total adjusted shareholders' equity	$ 9,057	$ 7,632

The reconciliation of net income to adjusted net income, which is included in adjusted ROE is as follows:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Net income	$ 640	$ 274	$ 1,172	$ 984
Reinsurance unrealized gains and losses	43	(12)	192	(100)
Adjusted net income	$ 683	$ 262	$ 1,364	$ 884

The reconciliation of net investment income to net investment earnings and earned rate is as follows:

	Three months ended September 30,				Nine months ended September 30,			
	2018		2017		2018		2017	
(In millions, except percentages)	Dollar	Rate	Dollar	Rate	Dollar	Rate	Dollar	Rate
GAAP net investment income	$ 1,070	4.30 %	$ 820	4.23 %	$ 2,883	4.39 %	$ 2,427	4.31 %
Reinsurance embedded derivative impacts	52	0.20 %	40	0.20 %	169	0.26 %	137	0.25 %
Net VIE earnings	39	0.16 %	27	0.14 %	55	0.08 %	59	0.10 %
Alternative income gain (loss)	(14)	(0.06)%	(4)	(0.02)%	(14)	(0.02)%	(11)	(0.02)%
Held for trading amortization	(21)	(0.08)%	(20)	(0.10)%	(65)	(0.10)%	(50)	(0.09)%
Total adjustments to arrive at net investment earnings/earned rate	56	0.22 %	43	0.22 %	145	0.22 %	135	0.24 %
Total net investment earnings/earned rate	$ 1,126	4.52 %	$ 863	4.45 %	$ 3,028	4.61 %	$ 2,562	4.55 %
Retirement Services	$ 1,108	4.55 %	$ 811	4.64 %	$ 2,957	4.63 %	$ 2,412	4.75 %
Corporate and Other	18	3.51 %	52	2.72 %	71	3.86 %	150	2.71 %
Total net investment earnings/earned rate	$ 1,126	4.52 %	$ 863	4.45 %	$ 3,028	4.61 %	$ 2,562	4.55 %
Retirement Services average invested assets	$ 97,512		$ 69,868		$ 85,169		$ 67,722	
Corporate and Other average invested assets	2,103		7,673		2,473		7,398	
Consolidated average invested assets	$ 99,615		$ 77,541		$ 87,642		$ 75,120	

The reconciliation of interest sensitive contract benefits to Retirement Services' cost of crediting on deferred annuities, and the respective rates, is as follows:

	Three months ended September 30,				Nine months ended September 30,			
	2018		2017		2018		2017	
(In millions, except percentages)	Dollar	Rate	Dollar	Rate	Dollar	Rate	Dollar	Rate
GAAP interest sensitive contract benefits	$ 741	3.72 %	$ 621	4.35 %	$ 1,092	2.13 %	$ 1,866	4.43 %
Interest credited other than deferred annuities	(44)	(0.22)%	(41)	(0.29)%	(125)	(0.24)%	(109)	(0.26)%
FIA option costs	231	1.16 %	154	1.08 %	611	1.19 %	448	1.08 %
Product charges (strategy fees)	(25)	(0.13)%	(19)	(0.13)%	(70)	(0.14)%	(53)	(0.13)%
Reinsurance embedded derivative impacts	29	0.14 %	9	0.06 %	35	0.07 %	27	0.06 %
Change in fair value of embedded derivatives – FIAs	(545)	(2.74)%	(464)	(3.25)%	(580)	(1.13)%	(1,397)	(3.32)%
Negative VOBA amortization	5	0.03 %	8	0.06 %	22	0.04 %	30	0.07 %
Unit-linked change in reserves	—	— %	—	— %	—	— %	(17)	(0.04)%
Other changes in interest sensitive contract liabilities	3	0.02 %	—	— %	3	0.01 %	—	— %
Total adjustments to arrive at cost of crediting on deferred annuities	(346)	(1.74)%	(353)	(2.47)%	(104)	(0.20)%	(1,071)	(2.54)%
Retirement Services cost of crediting on deferred annuities	$ 395	1.98 %	$ 268	1.88 %	$ 988	1.93 %	$ 795	1.89 %
Average account value	$ 79,673		$ 57,050		$ 68,421		$ 56,102	

The reconciliation of GAAP benefits and expenses to other liability costs is as follows:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
GAAP benefits and expenses	$ 1,882	$ 1,179	$ 4,033	$ 3,818
Premiums	(531)	(72)	(1,535)	(503)
Product charges	(119)	(86)	(321)	(252)
Other revenues	(10)	(8)	(22)	(24)
Cost of crediting	(135)	(105)	(342)	(321)
Change in fair value of embedded derivatives - FIA, net of offsets	(764)	(496)	(919)	(1,501)
DAC, DSI and VOBA amortization related to investment gains and losses	26	(16)	72	(51)
Rider reserves related to investment gains and losses	1	(4)	8	(9)
Policy and other operating expenses, excluding policy acquisition expenses	(98)	(101)	(291)	(305)
VIE operating expenses	—	—	(1)	—
AmerUs closed block fair value liability	8	(4)	98	(49)
Other	1	(14)	8	(78)
Total adjustments to arrive at other liability costs	(1,621)	(906)	(3,245)	(3,093)
Other liability costs	$ 261	$ 273	$ 788	$ 725
Retirement Services	$ 261	$ 228	$ 788	$ 632
Corporate and Other	—	45	—	93
Consolidated other liability costs	$ 261	$ 273	$ 788	$ 725

The reconciliation of policy and other operating expenses to operating expenses is as follows:

	Three months ended September 30,		Nine months ended September 30,	
(In millions)	2018	2017	2018	2017
Policy and other operating expenses	$ 158	$ 158	$ 453	$ 479
Interest expense	(15)	(2)	(44)	(10)
Policy acquisition expenses, net of deferrals	(60)	(58)	(162)	(174)
Integration, restructuring and other non-operating expenses	(2)	(14)	(18)	(34)
Stock compensation expenses	(3)	(7)	(8)	(30)
Total adjustments to arrive at operating expenses	(80)	(81)	(232)	(248)
Operating expenses	$ 78	$ 77	$ 221	$ 231
Retirement Services	$ 63	$ 51	$ 177	$ 157
Corporate and Other	15	26	44	74
Consolidated operating expenses	$ 78	$ 77	$ 221	$ 231

The reconciliation of total investments, including related parties, to invested assets is as follows:

(In millions)	September 30, 2018	December 31, 2017
Total investments, including related parties	$ 101,384	$ 84,367
Derivative assets	(2,515)	(2,551)
Cash and cash equivalents (including restricted cash)	3,941	4,993
Accrued investment income	686	652
Payables for collateral on derivatives	(2,315)	(2,323)
Reinsurance funds withheld and modified coinsurance	(123)	(579)
VIE and VOE assets, liabilities and noncontrolling interest	835	862
AFS unrealized (gains) losses	(186)	(2,794)
Ceded policy loans	(299)	(296)
Net investment receivables (payables)	(788)	(33)
Total adjustments to arrive at invested assets	(764)	(2,069)
Total invested assets	$ 100,620	$ 82,298

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The reconciliation of total investment funds, including related parties and VIEs, to alternative investments within invested assets is as follows:

(In millions)	September 30, 2018	December 31, 2017
Investment funds, including related parties and VIEs	$ 3,390	$ 2,580
CLO equities included in trading securities	139	182
Financial Credit Investment special-purpose vehicle included in trading securities related party	—	287
Investment funds within funds withheld at interest	505	416
Royalties, other assets included in other investments and other assets	72	76
Net assets of the VIE, excluding investment funds	188	288
Unrealized (gain) loss and other adjustments	(271)	—
Total adjustments to arrive at alternative investments	633	1,249
Alternative investments	$ 4,023	$ 3,829

The reconciliation of total liabilities to reserve liabilities is as follows:

(In millions)	September 30, 2018	December 31, 2017
Total liabilities	$ 109,135	$ 90,539
Long-term debt	(991)	—
Derivative liabilities	(124)	(134)
Payables for collateral on derivatives	(2,315)	(2,323)
Funds withheld liability	(389)	(407)
Other liabilities	(1,380)	(1,222)
Liabilities of consolidated VIEs	(2)	(2)
Reinsurance ceded receivables	(5,201)	(4,972)
Policy loans ceded	(299)	(296)
Other	(12)	—
Total adjustments to arrive at reserve liabilities	(10,713)	(9,356)
Total reserve liabilities	$ 98,422	$ 81,183

Liquidity and Capital Resources

There are two forms of liquidity relevant to our business, funding liquidity and balance sheet liquidity. Funding liquidity relates to our ability to fund operations. Balance sheet liquidity relates to our ability to liquidate or rebalance our balance sheet without incurring significant costs from fees, bid-offer spreads, or market impact. We manage our liquidity position by matching projected cash demands with adequate sources of cash and other liquid assets. Our principal sources of liquidity, in the ordinary course of business, are operating cash flows and holdings of cash, cash equivalents and other readily marketable assets.

Our investment portfolio is structured to ensure a strong liquidity position over time in order to permit timely payment of policy and contract benefits without requiring asset sales at inopportune times or at depressed prices. In general, liquid assets include cash and cash equivalents, highly rated corporate bonds, unaffiliated preferred stock and unaffiliated public common stock, all of which generally have liquid markets with a large number of buyers. The carrying value of these assets as of September 30, 2018 was $50.8 billion. Although our investment portfolio does contain assets that are generally considered illiquid for liquidity monitoring purposes (primarily mortgage loans, policy loans, real estate, investment funds, and affiliated common stock), there is some ability to raise cash from these assets if needed. In periods of economic downturn we may maintain higher cash balances than required to manage our liquidity risk and to take advantage of market dislocations as they arise. We have access to additional liquidity through our $1.0 billion revolving credit facility, which is undrawn as of the date hereof and has a remaining term of approximately two years. On January 3, 2018, we filed a registration statement on Form S-3 ASR (Shelf Registration Statement), which, subject to market conditions and other factors, provides us with access to the capital markets and on January 12, 2018, we issued $1.0 billion of senior unsecured notes under our Shelf Registration Statement. In addition, through our membership in the FHLB, we are eligible to borrow under variable rate short-term federal funds arrangements to provide additional liquidity.

We proactively manage our liquidity position to meet cash needs while minimizing adverse impacts on investment returns. We analyze our cash-flow liquidity over the upcoming 12 months by modeling potential demands on liquidity under a variety of scenarios, taking into account the provisions of our policies and contracts in force, our cash flow position, and the volume of cash and readily marketable securities in our portfolio. By policy, we maintain sufficient liquidity not only to meet our cash-flow requirements over the succeeding 12-month period in a moderately severe scenario (for example, a recessionary environment), but also to have excess liquidity available to invest into potential investment opportunities created from market dislocations. We also monitor our liquidity profile under more severe scenarios.

We perform a number of stress tests and analyses to assess our ability to meet our cash flow requirements, as well as the ability of our reinsurance and insurance subsidiaries to meet their collateral obligations. Among these analyses, we manage to the following ALM limits:

- our projected net cumulative cash flows, including both new business and target levels of new investments under a "plan scenario" and a "moderately severe scenario" event, are non-negative over a rolling 12-month horizon;
- we hold enough cash, cash equivalents and other discounted liquid limit assets to cover 12 months of AHL's and Athene USA's projected obligations, including debt servicing costs
  - minimum of 50% of expenses and 100% of debt servicing to be held in cash and cash equivalents at AHL operating accounts
  - minimum of 50% of any required AHL – Athene USA inter-company loan commitments to be held in cash and cash equivalents by AHL
  - dividends from ALRe sufficient to support the ongoing operations of AHL must be available under moderate and substantial stress scenarios
  - for purposes of administering this test, liquid limit assets are discounted by 25% and include public corporate bonds rated A- or above, liquid ABS (defined as prime auto, auto floorplan, Tier 1 subprime auto, auto lease, prime credit cards, equipment lease or utility stranded assets); RMBS with weighted average lives less than three years rated A- or above and CMBS with weighted average lives less than three years rated AAA- or above
- we seek to maintain sufficient capital and surplus at ALRe to meet the following collateral and capital maintenance calls under a substantial stress event, such as the failure of a major financial institution (Lehman event):
  - collateral calls from modco and ALRe third-party reinsurance contracts
  - U.S. regulated entity capital maintenance calls from nonmodco activity.

Insurance Subsidiaries' Liquidity

The primary cash flow sources for our insurance subsidiaries include retirement services product inflows (premiums), investment income, principal repayments on our investments, and net transfers from separate accounts and financial product deposits. Uses of cash include investment purchases, payments to policyholders for surrenders and withdrawals, policy acquisition costs, and general operating costs.

Our policyholder obligations are generally long-term in nature. However, one liquidity risk is an extraordinary level of early policyholder withdrawals. We include provisions within our annuity policies, such as surrender charges and market value adjustments (MVA), which are intended to protect us from early withdrawals. As of September 30, 2018 and December 31, 2017, approximately 81% and 86% , respectively, of our deferred annuity liabilities were subject to penalty upon surrender. In addition, as of September 30, 2018 and December 31, 2017, approximately 67% and 72%, respectively of policies contained MVAs that may also have the effect of limiting early withdrawals if interest rates increase. Our funding agreements, PRT obligations and payout annuities are generally non-surrenderable.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Cash Flows

Our cash flows were as follows:

	Nine months ended September 30,	
(In millions)	2018	2017
Net income	$ 1,172	$ 984
Payment at inception of reinsurance agreements, net	(394)	—
Non-cash revenues and expenses	457	358
Net cash provided by operating activities	1,235	1,342
Sales, maturities and repayment of investments	12,825	12,724
Purchases and acquisitions of investments	(18,920)	(17,518)
Other investing activities	(51)	335
Net cash used in investing activities	(6,146)	(4,459)
Deposits on investment-type policies and contracts	7,011	7,521
Withdrawals on investment-type policies and contracts	(4,254)	(3,701)
Net change in cash collateral posted for derivative transactions	(8)	513
Net proceeds and repayment of debt	998	—
Other financing activities	110	(54)
Net cash provided by financing activities	3,857	4,279
Effect of exchange rate changes on cash and cash equivalents	—	30
Net (decrease) increase in cash and cash equivalents[1]	$ (1,054)	$ 1,192

[1] *Includes cash and cash equivalents, restricted cash, and cash and cash equivalents of consolidated variable interest entities.*

Cash flows from operating activities

The primary cash inflows from operating activities include net investment income, annuity considerations and insurance premiums. The primary cash outflows from operating activities are comprised of benefit payments and operating expenses. Our operating activities generated cash flows totaling $1.2 billion and $1.3 billion for the nine months ended September 30, 2018 and 2017, respectively. The decrease in cash provided by operating activities was primarily driven by the ceding commission related to the Voya reinsurance transaction, higher tax refunds in 2017 and higher commissions due to strong retail sales, partially offset by an increase in net investment income reflecting an increase in our investment portfolio and an increase in PRT premiums.

Cash flows from investing activities

The primary cash inflows from investing activities are the sales, maturities and repayments of investments. The primary cash outflows from investing activities are the purchases and acquisitions of new investments. Our investing activities used cash flows totaling $6.1 billion and $4.5 billion for the nine months ended September 30, 2018 and 2017, respectively. The change in cash used in investing activities was primarily attributed to the purchase of investments related to the increase in deposits over liability outflows, the investment of proceeds from our debt issuance, the deconsolidation of AGER Bermuda Holding Ltd. and its subsidiaries and the reinvestment of earnings.

Cash flows from financing activities

The primary cash inflows from financing activities are deposits on our investment-type policies, changes of cash collateral posted for derivative transactions, capital contributions and proceeds from borrowing activities. The primary cash outflows from financing activities are withdrawals on our investment-type policies, changes of cash collateral posted for derivative transactions and repayments of borrowing activities. Our financing activities provided cash flows totaling $3.9 billion and $4.3 billion for the nine months ended September 30, 2018 and 2017, respectively. The change in cash provided from financing activities was primarily attributed to the change in cash collateral posted for derivative transactions and lower funding agreement issuances in 2018, partially offset by proceeds from the issuance of debt.

Holding Company Liquidity

AHL is a holding company whose primary liquidity needs include the cash-flow requirements relating to its corporate activities, including day-to-day operations, debt servicing and strategic transactions, such as acquisitions. The primary source of AHL's cash flow is dividends from its subsidiaries, which are expected to be adequate to fund cash flow requirements based on current estimates of future obligations.

The ability of AHL’s insurance subsidiaries to pay dividends is limited by applicable laws and regulations of the jurisdictions where the subsidiaries are domiciled, as well as agreements entered into with regulators. These laws and regulations require, among other things, the insurance subsidiaries to maintain minimum solvency requirements and limit the amount of dividends these subsidiaries can pay.

Subject to these limitations and prior notification to the appropriate regulatory agency, the U.S. insurance subsidiaries are permitted to pay ordinary dividends based on calculations specified under insurance laws of the relevant state of domicile. Any distributions above the amount permitted by statute in any twelve month period are considered to be extraordinary dividends, and the approval of the appropriate regulator is required prior to payment. In addition, dividends from U.S. insurance subsidiaries to ALRe would result in a 30% withholding tax. AHL does not currently plan on having the U.S. subsidiaries pay any dividends to ALRe.

Dividends from ALRe are projected to be the primary source of AHL’s liquidity. Under the Bermuda Insurance Act, ALRe is prohibited from paying a dividend in an amount exceeding 25% of the prior year’s statutory capital and surplus, unless at least two members of ALRe’s board of directors and its principal representative in Bermuda sign and submit to the Bermuda Monetary Authority (BMA) an affidavit attesting that a dividend in excess of this amount would not cause ALRe to fail to meet its relevant margins. In certain instances, ALRe would also be required to provide prior notice to the BMA in advance of the payment of dividends. In the event that such an affidavit is submitted to the BMA in accordance with the Bermuda Insurance Act, and further subject to ALRe meeting its relevant margins, ALRe is permitted to distribute up to the sum of 100% of statutory surplus and an amount less than 15% of its total statutory capital. Distributions in excess of this amount require the approval of the BMA.

The maximum distribution permitted by law or contract is not necessarily indicative of our actual ability to pay such distributions, which may be further restricted by business and other considerations, such as the potential imposition of withholding tax and the impact of such distributions on surplus, which could affect our ratings or competitive position and the amount of premiums that can be written. Specifically, the level of capital needed to maintain desired financial strength ratings from rating agencies, including S&P, A.M. Best and Fitch, is of particular concern when determining the amount of capital available for distributions. AHL believes its insurance subsidiaries have sufficient statutory capital and surplus, combined with additional capital available to be provided by AHL, to meet their financial strength ratings objectives. Finally, state insurance laws and regulations require that the statutory surplus of our insurance subsidiaries following any dividend or distribution must be reasonable in relation to their outstanding liabilities and adequate for the insurance subsidiaries’ financial needs.

Other Sources of Funding

If needed, we may seek to secure additional funding at the holding company level by means other than dividends from subsidiaries, such as by drawing on our undrawn $1.0 billion credit facility or by pursuing future issuances of debt or equity securities to third-party investors. However, such additional funding may not be available on terms favorable to us or at all, depending on our financial condition or results of operations or prevailing market conditions. In addition, certain covenants in our credit facility prohibit us from incurring any debt not expressly permitted thereby, which may limit our ability to pursue future issuances of debt.

Shelf Registration

On January 3, 2018, we filed our Shelf Registration Statement with the United States Securities and Exchange Commission (SEC), which became effective upon filing. Under our Shelf Registration Statement, subject to market conditions we have the ability to issue, in indeterminate amounts, debt securities, preferred shares, depositary shares, Class A common shares, warrants and units. On January 12, 2018, we issued $1.0 billion in aggregate principal amount of 4.125% Senior Notes due January 2028 under our Shelf Registration Statement.

Membership in Federal Home Loan Bank

We are a member of the FHLB of Des Moines (FHLBDM) and the FHLB of Indianapolis (FHLBI). Membership in a FHLB requires the member to purchase FHLB common stock based on a percentage of the dollar amount of advances outstanding, subject to the investment being greater than or equal to a minimum level. We owned a total of $43 million and $36 million of FHLB common stock as of September 30, 2018 and December 31, 2017, respectively.

Through our membership in the FHLBDM and FHLBI, we are eligible to borrow under variable rate short-term federal funds arrangements to provide additional liquidity. The borrowings must be secured by eligible collateral such as mortgage loans, eligible CMBS or RMBS, government or agency securities and guaranteed loans. There were no outstanding borrowings under these arrangements as of September 30, 2018 or December 31, 2017.

On August 11, 2016, we provided notice to the FHLBI that Athene Life Insurance Company (ALIC) is withdrawing its membership thereto. The FHLBI confirmed receipt of our request on the following day. Pursuant to the FHLBI’s capital plan, ALIC’s membership will be withdrawn as of the fifth anniversary of the FHLBI’s receipt of our notice. Until such time that ALIC’s membership is withdrawn, ALIC continues to have all of the rights and obligations of being a member of the FHLBI, except that with respect to some or all of the FHLBI stock that ALIC owns, we will be entitled to a lower dividend amount, to the extent that the FHLBI declares a dividend. ALIC may continue to borrow from the FHLBI, provided that without the consent of the FHLBI, the transaction must mature or otherwise terminate prior to ALIC’s withdrawal of membership.

We have issued funding agreements to the FHLB in exchange for cash advances. These funding agreements were issued in an investment spread strategy, consistent with other investment spread operations. As of September 30, 2018 and December 31, 2017, we had funding agreements outstanding with the FHLB in the aggregate principal amount of $701 million and $573 million, respectively.

The maximum FHLB indebtedness by a member is determined by the amount of collateral pledged, and cannot exceed a specified percentage of the member's total statutory assets, dependent on the internal credit rating assigned to the member by the FHLB. As of September 30, 2018, the total maximum borrowings under the FHLBDM facility were limited to $16.8 billion. However, our ability to borrow under the facility is constrained by the availability of assets that qualify as eligible collateral under the facility and by the Iowa Code requirement that we maintain funds equivalent to our legal reserve in certain permitted investments, from which we exclude pledged assets. Considering these limitations, we estimate that, as of September 30, 2018, we had the ability to draw up to a total of approximately $1.5 billion, inclusive of borrowings then outstanding. This estimate is based on our internal analysis and assumptions, and may not accurately measure collateral which is ultimately acceptable to the FHLB. Drawing such amounts would have an adverse impact on AAIA's RBC ratio, which may further restrict our ability or willingness to draw up to our estimated capacity.

Capital Resources

As of December 31, 2017 and 2016, our U.S. insurance companies' total adjusted capital (TAC), as defined by the NAIC, was $1.9 billion and $1.8 billion, respectively, and our ALRe statutory capital, as defined by the BMA, was $7.0 billion and $6.1 billion, respectively. As of December 31, 2017 and 2016, our U.S. RBC ratio was 490% and 478%, respectively, and our Bermuda Solvency Capital Requirement (BSCR) ratio was 354% and 228%, respectively, all above our internal targets. Each U.S. domestic insurance subsidiary's state of domicile imposes minimum RBC requirements that were developed by the NAIC. The formulas for determining the amount of RBC specify various weighting factors that are applied to financial balances or various levels of activity based on the perceived degree of risk. Regulatory compliance is determined by a ratio of TAC to its authorized control level RBC (ACL). Our TAC was significantly in excess of all regulatory standards and above our internal targets as of September 30, 2018, December 31, 2017 and 2016, respectively. ALRe adheres to BMA regulatory capital requirements to maintain statutory capital and surplus to meet the minimum margin of solvency (MMS) and maintain minimum economic balance sheet (EBS) capital and surplus to meet the enhanced capital requirement. Under the EBS framework, ALRe's assets are recorded at market value and its insurance reserves are determined by reference to nine prescribed scenarios, with the scenario resulting in the highest reserve balance being ultimately required to be selected. The ALRe EBS capital and surplus was $7.7 billion and $4.4 billion resulting in a BSCR ratio of 354% and 228% as of December 31, 2017 and 2016, respectively. The minimum capital requirement ratio to be considered solvent by the BMA is 100%. As of September 30, 2018, December 31, 2017 and 2016, ALRe held the appropriate capital to adhere to these regulatory standards. In evaluating our capital position and the amount of capital needed to support our Retirement Services segment, we review our ALRe capital by applying the NAIC RBC factors. As of December 31, 2017 and 2016, our ALRe RBC ratio was 562% and 529%, respectively, both above our internal targets. We believe that we enjoy a strong capital position in light of our risks and that we are well positioned to meet policyholder and other obligations. We also believe that our strong capital position, as well as our excess capital position, provides us the opportunity to take advantage of market dislocations as they arise. Changes in U.S. tax rates under the Tax Act will impact our RBC ratios beginning December 31, 2018. See *Industry Trends and Competition – Regulatory Developments* for further discussion.

Balance Sheet and Other Arrangements

Contractual Obligations

The following table summarizes estimated future payments on our contractual obligations as of September 30, 2018:

	Payments Due by Period				
(In millions)	Total	2018	2019-2020	2021-2022	2023 and thereafter
Interest sensitive contract liabilities	$ 88,903	$ 7,256	$ 15,643	$ 16,762	$ 49,242
Future policy benefits	14,771	197	431	467	13,676
Other policy claims and benefits	140	140	—	—	—
Dividends payable to policyholders	120	5	10	10	95
Long-term debt[1]	1,413	21	83	83	1,226
Total	$ 105,347	$ 7,619	$ 16,167	$ 17,322	$ 64,239

[1] *The obligations for long-term debt payments include contractual maturities of principal and estimated future interest payments based on the terms of the debt agreement, as described in Note 8 – Debt to the condensed consolidated financial statements.*

Other

In the normal course of business, we invest in various investment funds which are considered VIEs, and we consolidate a VIE when we are considered the primary beneficiary of the entity. For further discussion of our involvement with VIEs, see *Note 4 – Variable Interest Entities* to the condensed consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Off Balance Sheet Arrangements

Collateral for Derivatives

We enter into derivatives for risk management purposes. We hold non-cash collateral from counterparties for our derivatives, which has not been recorded on our consolidated balance sheets. These amounts were $128 million and $221 million as of September 30, 2018 and December 31, 2017, respectively.

Collateral for Reinsurance

We hold collateral for and provide collateral to counterparties for our reinsurance agreements. We held $765 million and $259 million as of September 30, 2018 and December 31, 2017, respectively, of collateral on behalf of our reinsurers.

Critical Accounting Estimates and Judgments

The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of any contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Amounts based on such estimates involve numerous assumptions subject to varying and potentially significant degrees of judgment and uncertainty, particularly related to the future performance of the underlying business, and will likely change in the future as additional information becomes available. Critical estimates and assumptions are evaluated on an ongoing basis based on historical developments, market conditions, industry trends and other information that is reasonable under the circumstances. There can be no assurance that actual results will conform to estimates and assumptions and that reported results of operations will not be materially affected by the need to make future accounting adjustments to reflect periodic changes in these estimates and assumptions. Critical accounting estimates are impacted significantly by our methods, judgments and assumptions used in the preparation of the consolidated financial statements and should be read in conjunction with our significant accounting policies described in *Note 1 – Business, Basis of Presentation and Significant Accounting Policies* to the consolidated financial statements of our 2017 Annual Report. The most critical accounting estimates and judgments include those used in determining:

- fair value of investments;
- impairment of investments and valuation allowances;
- future policy benefit reserves;
- derivatives valuation, including embedded derivatives;
- deferred acquisition costs, deferred sales inducements and value of business acquired;
- stock-based compensation;
- consolidation of VIEs; and
- valuation allowances on deferred tax assets.

The above critical accounting estimates and judgments are discussed in detail in *Part II—Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations* of our 2017 Annual Report; however, due to the significance of the Voya reinsurance transactions, the following updates and replaces the corresponding tables provided in the 2017 Annual Report:

Future Policy Benefits*—Liabilities for Guaranteed Living Withdrawal Benefits and Guaranteed Minimum Death Benefits*

As of September 30, 2018, the GLWB and GMDB liability balance, including the impacts of shadow adjustments, totaled $3.3 billion. The increase (decrease) to the GLWB and GMDB liability balance, including the impacts of shadow adjustments from hypothetical changes in projected assessments, changes in the discount rate and annual equity growth is summarized as follows:

(In millions)	September 30, 2018
+10% assessments	$ (97)
−10% assessments	108
+100 bps discount rate	99
−100 bps discount rate	(113)
1% lower annual equity growth	44

Derivatives*—Valuation of Embedded Derivatives on FIAs*

As of September 30, 2018, we had embedded derivative liabilities classified as Level 3 in the fair value hierarchy of $8.7 billion. The increase (decrease) to the embedded derivatives on FIA products from hypothetical changes in discount rates is summarized as follows:

(In millions)	September 30, 2018
+100 bps discount rate	$ (690)
−100 bps discount rate	792

Deferred Acquisition Costs, Deferred Sales Inducements, and Value of Business Acquired—As of September 30, 2018, DAC, DSI and VOBA totaled $5.0 billion. The increases (decreases) to DAC, DSI and VOBA from hypothetical changes in estimated future gross profits and the embedded derivative discount rate are summarized as follows:

	September 30, 2018			
(In millions)	DAC	DSI	VOBA	Total
+10% estimated future gross profits	$ 41	$ 18	$ 47	$ 106
−10% estimated future gross profits	(47)	(20)	(52)	(119)
+100 bps discount rate	(88)	(35)	(41)	(164)
−100 bps discount rate	90	42	46	178

See *Note 1 – Business, Basis of Presentation and Significant Accounting Policies* to the condensed consolidated financial statements for adoption of new and future accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risks

We regularly analyze our exposure to market risks, which reflect potential losses in value due to credit and counterparty risk, interest rate risk, currency risk, commodity price risk and equity price risk. As a result of that analysis, we have determined that we are primarily exposed to credit risk, interest rate risk and to a lesser extent, equity price risk. A description of our market risk exposures, including strategies used to manage our exposure to market risk, may be found under *Part II—Item 7A. Quantitative and Qualitative Disclosures About Market Risk* of the 2017 Annual Report.

There have been no material changes to our market risk exposures from those previously disclosed in the 2017 Annual Report, except as described below. The following updates and replaces the information provided in the 2017 Annual Report under the similarly titled headings:

Sensitivities

Interest Rate Risk

We assess interest rate exposures for financial assets, liabilities and derivatives using hypothetical stress tests and exposure analyses. Assuming all other factors are constant, if there was an immediate, parallel increase in interest rates of 25 basis points from levels as of September 30, 2018, the estimated point-in-time impact to our pre-tax consolidated statements of income would have been a decrease of $163 million as of September 30, 2018. If there were a similar parallel increase in interest rates from levels as of December 31, 2017, the estimated point-in-time impact to our pre-tax consolidated statements of income would have been an increase of $18 million as of December 31, 2017. The decrease compared to December 31, 2017 was driven by the Voya reinsurance transactions on June 1, 2018, which substantially increased our exposure to reinsurance unrealized gains and losses that are included in our pre-tax income. An immediate, parallel decline in interest rates of 25 basis points is estimated to increase our pre-tax consolidated statements of income as of September 30, 2018 and December 31, 2017 by similar amounts to the decreases shown above.

Assuming a 25 basis points increase in interest rates persists for a 12-month period, the estimated impact to adjusted operating income is expected to be relatively unchanged from the sensitivities shown in *Part II—Item 7A. Quantitative and Qualitative Disclosures About Market Risk* of the 2017 Annual Report, as there were minimal floating rate assets added as a part of the Voya reinsurance transaction. The models used to estimate the impact of a 25 basis point change in market interest rates incorporate numerous assumptions, require significant estimates and assume an immediate change in interest rates without any discretionary management action to counteract such a change. Consequently, potential changes in our valuations indicated by these simulations will likely be different from the actual changes experienced under any given interest rate scenarios and these differences may be material. Because we actively manage our assets and liabilities, the net exposure to interest rates can vary over time. However, any such decreases in the fair value of fixed maturity securities, unless related to credit concerns of the issuer requiring recognition of an OTTI, would generally be realized only if we were required to sell such securities at losses to meet liquidity needs.

Public Equity Risk

Assuming all other factors are constant, we estimate that a decline in public equity market prices of 10% would be relatively unchanged from the sensitivities shown in *Part II—Item 7A. Quantitative and Qualitative Disclosures About Market Risk* of the 2017 Annual Report.

Item 4. Controls and Procedures

We maintain disclosure controls and procedures as such term is defined under Exchange Act Rule 13a-15(e), that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and our management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. We have carried out an evaluation, as of the end of the period covered by this report, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at attaining the level of reasonable assurance noted above. In light of the overlap between disclosure controls and procedures and internal control over financial reporting, our evaluation of disclosure controls and procedures excluded an assessment of those disclosure controls and procedures related to the Voya reinsurance transactions discussed in *Note 7 – Reinsurance* to the condensed consolidated financial statements that are subsumed by internal control over financial reporting.

There were no changes to our internal control over financial reporting as defined in Exchange Act Rule 13a-15(f) during the quarter ended September 30, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are subject to litigation arising in the ordinary course of our business, including litigation principally relating to our FIA business. We cannot assure you that our insurance coverage will be adequate to cover all liabilities arising out of such claims. The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. There is significant judgment required in assessing both the probability of an adverse outcome and the determination as to whether an exposure can be reasonably estimated. In management's opinion, the ultimate disposition of any current legal proceedings or claims brought against us will not have a material effect on our financial condition, results of operations or cash flows. Litigation is, however, inherently uncertain and an adverse outcome from such litigation could have a material effect on the operating results of a particular reporting period.

From time to time, in the ordinary course of business and like others in the insurance and financial services industries, we receive requests for information from government agencies in connection with such agencies' regulatory or investigatory authority. Such requests can include financial or market conduct examinations, subpoenas or demand letters for documents to assist the government in audits or investigations. We and each of our U.S. insurance subsidiaries review such requests and notices and take appropriate action. We have been subject to certain requests for information and investigations in the past and could be subject to them in the future.

For a description of certain legal proceedings affecting us, see *Note 13 – Commitments and Contingencies – Litigation, Claims and Assessments* to the condensed consolidated financial statements.

Item 1A. Risk Factors

The following should be read in conjunction with, and supplements and amends, the factors that may affect our business or operations described in *Part I—Item 1A. Risk Factors* of our 2017 Annual Report. Other than as described in this Item 1A, there have been no material changes to our risk factors from the risk factors previously disclosed in our 2017 Annual Report.

The following updates and replaces the last paragraph of the similarly named risk factor included in our 2017 Annual Report:

Our business, financial condition, liquidity, results of operations and cash flows depend on the accuracy of our management's assumptions and estimates, and we could face significant losses if these assumptions and estimates differ significantly from actual results

BEAT Mitigating Actions

In light of the possibility of material additional tax cost to our U.S. subsidiaries and the lack of clear guidance regarding the appropriate method by which to compute the BEAT, during the three months ended March 31, 2018, we restructured our affiliated modco arrangements to ensure that they would not be subject to the BEAT in the event that we do not receive guidance that the BEAT applies on a net basis, and during the three months ended September 30, 2018, we implemented additional reinsurance arrangements common in the insurance industry to further mitigate the potential effect on our results of operations should the BEAT apply on a gross basis. We have made estimates regarding the effective and overall tax rates we expect to experience as a result of undertaking these actions. The determination of each such figure, or range of figures, involves numerous estimates and assumptions regarding the efficacy of such actions in bringing about the desired outcomes and the magnitude of such outcomes to be experienced. Such estimates and assumptions may prove incorrect. To the extent that actual experience differs from the estimates and assumptions inherent in our projections, our future effective and overall tax rates may deviate materially from the estimates provided and our financial condition and results of operations may be materially less favorable than are implied by the projections provided.

The following updates and replaces the third paragraph of the similarly named risk factor included in our 2017 Annual Report:

We rely significantly on third parties for investment services and certain other services related to our policies, and we may be held responsible for obligations that arise from the acts or omissions of third parties under their respective agreements with us if they are deemed to have acted on our behalf.

Our U.S. insurance subsidiaries have experienced increased service and administration complaints related to the conversion and administration of the block of life insurance business acquired in connection with our acquisition of Aviva USA and reinsured to affiliates of Global Atlantic. The life insurance policies included in this block have been and are currently being administered by AllianceOne, a subsidiary of DXC Technology Company, which was retained by such Global Atlantic affiliates to provide services on such policies. AllianceOne also administers certain annuity policies that were on Aviva USA's legacy policy administration systems that were also converted in connection with the acquisition of Aviva USA and have experienced similar service and administration issues.

As a result of the difficulties experienced with respect to the administration of such policies, we have received notifications from several state regulators, including but not limited to the NYSDFS, CDI and the Texas Department of Insurance, indicating, in each case, that the respective regulator planned to undertake a market conduct examination or enforcement proceeding of the applicable U.S. insurance subsidiary relating to the treatment of policyholders subject to our reinsurance agreements with affiliates of Global Atlantic and the conversion of such annuity policies, including the administration of such blocks by AllianceOne. On June 28, 2018 we entered into a consent order with the NYSDFS resolving that matter in a manner that, when considering the indemnification received from affiliates of Global Atlantic, did not have a material impact on our financial condition, results of operations or cash flows.

In addition to the foregoing, we have received inquiries, and expect to continue to receive inquiries, from other regulatory authorities regarding the conversion matter. In addition to the examinations and proceedings initiated to date, it is possible that other regulators may pursue similar formal examinations, inquiries or enforcement proceedings and that any examinations, inquiries and/or enforcement proceedings may result in fines, administrative penalties and payments to policyholders. While we do not expect the amount of any such fines, penalties or payments arising from these matters to be material to our financial condition, results of operations or cash flows, it is possible that such amounts could be material.

Pursuant to the terms of the reinsurance agreements between us and the relevant affiliates of Global Atlantic, the applicable affiliates of Global Atlantic have financial responsibility for the ceded life block and are subject to significant administrative service requirements, including compliance with applicable law. The agreements also provide for indemnification to us, including for administration issues.

The following updates and replaces the similarly named risk factor included in our 2017 Annual Report:

We rely on our investment management agreements with AAM for the management of our investment portfolio. AAM may terminate these arrangements at any time, and there are limitations on our ability to terminate such arrangements, which may adversely affect our investment results.

We rely on AAM to provide us with investment management services pursuant to various investment management agreements (IMAs). AAM relies in part on its ability to attract and retain key people, and the loss of services of one or more of the members of AAM's senior management could delay or prevent AAM from fully implementing our investment strategy.

IMA Termination Rights

Our bye-laws currently provide that we may not, and will cause our subsidiaries not to, terminate any IMA among us or any of our subsidiaries, on the one hand, and AAM, on the other hand, before any annual anniversary of October 31 (each such date, an IMA Termination Election Date) and any termination on an IMA Termination Election Date requires (i) the approval of two-thirds of our Independent Directors (as defined below) and (ii) written notice to AAM of such termination at least 30 days' prior to an IMA Termination Election Date. If our Independent Directors make any such election to terminate and notice of such termination is delivered, the termination will be effective on the second anniversary of the applicable IMA Termination Election Date (IMA Termination Effective Date). Notwithstanding the foregoing, (A) our Independent Directors may only elect to terminate an IMA on an IMA Termination Election Date if two-thirds of our Independent Directors determine, in their sole discretion and acting in good faith, that either (i) there has been unsatisfactory long-term performance materially detrimental to us by AAM, or (ii) the fees being charged by AAM are unfair and excessive compared to a comparable asset manager (provided, that in either case such Independent Directors must deliver notice of any such determination to AAM and AAM will have until the applicable IMA Termination Effective Date to address such concerns, and provided, further, that in the case of such a determination that the fees being charged by AAM are unfair and excessive, AAM has the right to lower its fees to match the fees of such comparable asset manager) and (B) upon the determination by two-thirds of our Independent Directors, we or our subsidiaries may also terminate an IMA with AAM as a result of either (i) a material violation of law relating to AAM's investment management business, or (ii) AAM's gross negligence, willful misconduct or reckless disregard of AAM's obligations under the relevant agreement, and in either case the delivery of written notice at least 30 days' prior to such termination and such termination will be effective at the end of such 30-day period (the events described in the foregoing clauses (A) and (B) are referred to in more detail in our bye-laws as "AHL Cause"). For purposes of these provisions of the bye-laws, an "Independent Director" cannot be (x) an officer or employee of ours or any of our subsidiaries or (y) an officer or employee of (1) any member of the Apollo Group described in clauses (i) through (iv) of the definition of "Apollo Group" as set forth in our bye-laws or (2) AGM or any of its subsidiaries (excluding any subsidiary that constitutes any portfolio company (or investment) of (A) an investment fund or other investment vehicle whose general partner, managing member or similar governing person is owned, directly or indirectly, by AGM or by one or more of its subsidiaries or (B) a managed account agreement (or similar arrangement) whereby AGM or one or more of its subsidiaries serves as general partner, managing member or in a similar governing position).

Our organizational documents give our Independent Directors complete discretion, while acting in good faith, as to whether to determine if an AHL Cause event has occurred with respect to any IMA with AAM, and therefore our Independent Directors are under no obligation to make, and therefore may exercise their discretion never to make, such a determination.

The boards of directors of AHL's subsidiaries may terminate an IMA with AAM relating to the applicable subsidiary if such subsidiary's board of directors determines that such termination is required in the exercise of its fiduciary duties. If our subsidiaries do elect to terminate any such agreement, other than as provided above, we may be in breach of our bye-laws, which could subject us to regulatory scrutiny, expose us to shareholder lawsuits and could have a negative effect on our financial condition and results of operations.

On September 20, 2018, we entered into a letter agreement (Letter Agreement) with AAM. In the Letter Agreement, (1) we confirmed that AHL's Board of Directors approved, and recommended that AHL's shareholders approve, the amendment and restatement of our bye-laws (Existing Bye-Laws) in substantially the form attached as an exhibit to the Letter Agreement (Proposed Bye-Laws) and (2) we agreed that we will seek the approval of AHL's shareholders of the amendment and restatement of our bye-laws in substantially such form at the next annual general meeting of AHL's shareholders.

The Proposed Bye-Laws, if adopted as our bye-laws, will amend the IMA Termination Election Date (as defined in the Existing Bye-Laws) to be the fourth anniversary of the date on which the Proposed Bye-Laws are adopted as our bye-laws and each two-year anniversary thereafter. The Proposed Bye-Laws, if adopted as our bye-laws, will continue to permit us to terminate the IMA, or any New IMA (as each such term is defined in the Existing Bye-Laws), for cause.

Investment Management Fees

Further, except in limited circumstances, we currently pay AAM 0.40% per year on assets managed up to $65.8 billion and 0.30% per year on assets managed in excess of such amount. We pay additional fees to Apollo and its affiliates for providing sub-advisory services and acting as manager of investment funds in which we invest. Any such fees may be higher than what other investment managers may be willing to charge us currently for investment services. Because of the services and the unique acquisition opportunities provided by AAM and Apollo that we are able to access that many other companies cannot access, we do not currently expect our board of directors or our Independent Directors would elect to terminate any IMA. These limitations on our ability to terminate the IMAs with AAM could have a negative effect on our financial condition and results of operations.

Termination by AAM

Conversely, we may be adversely affected if AAM elects to terminate an IMA at a time when such agreement remains advantageous to us. We depend upon AAM to implement our investment strategy. However, AAM does not face the restrictions described above with regards to its ability to terminate any of its agreements with us and may terminate such agreements at any time. If AAM chooses to terminate such agreements, there is no assurance that we could find a suitable replacement or that certain of the opportunities made available to us as a result of our relationship with AAM and Apollo would be offered by a suitable replacement, and therefore our results of operations and financial condition could be adversely impacted by our failure to retain a satisfactory investment manager.

The following updates and replaces the similarly named section of risk factors included in our 2017 Annual Report:

Risks Relating to Taxation

The BEAT may significantly increase our tax liability and our efforts to mitigate the cost of the BEAT may be unnecessary, inefficient, ineffective, or counterproductive.

The Tax Act introduced a new tax called the BEAT. The BEAT operates as a minimum tax and is generally calculated as a percentage (5% in 2018, 10% in 2019-2025, and 12.5% in 2026 and thereafter) of the "modified taxable income" of an "applicable taxpayer." Modified taxable income is calculated by adding back to a taxpayer's regular taxable income the amount of certain "base erosion tax benefits" with respect to certain payments made to foreign affiliates of the taxpayer, as well as the "base erosion percentage" of any net operating loss deductions. The BEAT applies for a taxable year only to the extent it exceeds a taxpayer's regular corporate income tax liability for such year (determined without regard to certain tax credits).

Certain of our reinsurance agreements require our U.S. subsidiaries to pay or accrue substantial amounts to our non-U.S. reinsurance subsidiaries that would be characterized as "base erosion payments" with respect to which there are "base erosion tax benefits." However, it is not clear whether any amounts paid or accrued by our non-U.S. reinsurance subsidiaries to our U.S. subsidiaries under these reinsurance agreements would be netted against these amounts for purposes of calculating the "base erosion payments" and "base erosion tax benefits." Accordingly, the BEAT could significantly increase the tax liability of our U.S. subsidiaries and have a material adverse effect on our results of operations.

In light of the possibility of material additional tax cost to our U.S. subsidiaries due to the lack of clear guidance regarding the application of the BEAT, during the three months ended March 31, 2018, we restructured our affiliated modco arrangements to ensure that they would not be subject to the BEAT in the event that we do not receive guidance that BEAT applies on a net basis, and during the three months ended September 30, 2018, we implemented additional reinsurance arrangements common in the insurance industry to further mitigate the potential effect on our results of operations should the BEAT apply on a gross basis. Our efforts may not succeed. Additionally, when the uncertainty regarding the BEAT is resolved, our actions may, in hindsight, prove to have been unnecessary and inefficient.

The term "related" is defined broadly under the BEAT and application of the definition and the tax attribution rules to which it refers can produce results that are hard to predict. We believe that other than our wholly-owned subsidiaries, none of our reinsurance counterparties should be treated as "related" to us for purposes of the BEAT, and therefore payments under our reinsurance arrangements with such counterparties are not subject to the BEAT. However, there is considerable uncertainty regarding the scope of the term "related" for BEAT purposes, and no assurances can be made that the IRS will not assert that one or more of our reinsurance counterparties are "related" to us for purposes of the BEAT. A successful challenge would have a material adverse effect on our results of operation.

The application of the BEAT to our reinsurance arrangements could be affected by further legislative action, administrative guidance or court decisions. Any such legislative action, administrative guidance or court decisions may not be available at the time that we are required to determine the amount of federal income tax incurred by our U.S. subsidiaries for subsequent quarters, and they could have retroactive effect. Tax authorities may later disagree with our BEAT calculations, or the interpretations on which those calculations are based, and assess additional taxes, interest and penalties, and the uncertainty regarding the correct interpretation of the BEAT may make such disagreements more likely. We will determine the appropriateness of our tax provision in accordance with GAAP. However, there can be no assurance that this provision will accurately reflect the amount of federal income tax that our U.S. subsidiaries ultimately pay, as that amount could differ materially from our estimate.

Actions that we have taken to mitigate the impact of the BEAT in light of the uncertainties described above may have adverse tax consequences to our business, such as subjecting profit from our affiliate reinsurance to a layer of withholding tax up to 30%, which would not have been payable under our previous structure. In addition, it is possible that we will be required to take further action before the uncertainty regarding the BEAT is resolved, and accordingly any further action we take may, in hindsight, prove to have been unnecessary, inefficient, ineffective or counterproductive.

AHL or its non-U.S. subsidiaries may be subject to U.S. federal income taxation.

AHL and its non-U.S. subsidiaries are incorporated under the laws of non-U.S. jurisdictions, including Bermuda, and currently intend to operate in a manner that will not cause either to be treated as being engaged in a trade or business within the U.S. or subject to current U.S. federal income taxation on their net income. However, because there is considerable uncertainty as to when a foreign corporation is engaged in a trade or business within the United States, as the law is unclear and the determination is highly factual and must be made annually, there can be no assurance that the IRS will not successfully contend that AHL or one of its non-U.S. subsidiaries is engaged in a trade or business in the U.S. In addition, although AHL and its non-U.S. subsidiaries currently intend to operate in a manner that would not cause them to be treated as engaged in a trade or business within the U.S., the recent enactment of the BEAT, the reduction of the federal income tax rate applicable to corporations included in the Tax Act, and other factors may cause the companies to conduct their business differently. If AHL or one of its non-U.S. subsidiaries were considered to be engaged in a trade or business in the U.S., it could be subject to U.S. federal income taxation on a net basis on its income that is effectively connected with such U.S. trade or business (including branch profits tax on the portion of its earnings and profits that is attributable to such income). Any such U.S. federal income taxation could result in substantial tax liabilities and consequently could have a material adverse effect on our financial condition and results of future operations.

U.S. persons who own our Class A common shares may be subject to U.S. federal income taxation at ordinary income rates on our undistributed earnings and profits.

AHL's bye-laws generally limit the voting power of our Class A common shares (and certain other of our voting securities) such that no person owns (or is treated as owning) more than 9.9% of the total voting power of our common shares (with certain exceptions). AHL's bye-laws also currently reduce the voting power of Class B common shares held by certain holders if (A) one or more U.S. persons that own (or are treated as owning) more than 9.9% of the total voting power of our common shares own (or are treated as owning) individually or in the aggregate more than 24.9% of the voting power or the value of our common shares or (B) a U.S. person that is classified as an individual, an estate or a trust for U.S. federal income tax purposes owns (or is treated as owning) more than 9.9% of the total voting power of our common shares. Additionally, AHL's bye-laws require the board of AHL to refer certain decisions with respect to our non-U.S. subsidiaries to our shareholders, and to vote our shares in those subsidiaries accordingly. These provisions were intended to reduce the likelihood that AHL or its non-U.S. subsidiaries will be treated as a CFC, other than for purposes of taking into account related person insurance income (RPII). However, the relevant attribution rules are complex and there is no definitive legal authority on whether the voting provisions included in AHL's organizational documents are effective for purposes of the CFC provisions.

Moreover, the Tax Act eliminated the prohibition on "downward attribution" from non-U.S. persons to U.S. persons under Section 958(b)(4) of the Internal Revenue Code for purposes of determining constructive stock ownership under the CFC rules. As a result, our U.S. subsidiaries are deemed to own all of the stock of ALRe's non-U.S. subsidiaries held by ALRe for CFC purposes. Accordingly, ALRe's non-U.S. subsidiaries are currently treated as CFCs, without regard to whether the provisions of our bye-laws described above are effective for purposes of the CFC provisions. The legislative history under the Tax Act indicates that this change was not intended to cause any of AHL's non-U.S. subsidiaries to be treated as a CFC with respect to a 10% U.S. Shareholder (as defined below) that is not related to our U.S. subsidiaries. However, it is not clear whether the IRS or a court would interpret the change made by the Tax Act in a manner consistent with such indicated intent.

For any taxable year in which AHL or one of its non-U.S. subsidiaries is treated as a CFC, each U.S. person treated as a "10% U.S. Shareholder" with respect to AHL or its non-U.S. subsidiaries that held our common shares directly or indirectly through non-U.S. entities as of the last day in such taxable year that the relevant company was a CFC would generally be required to include in gross income as ordinary income its pro rata share of the relevant company's insurance and reinsurance income and certain other investment income, regardless of whether that income was actually distributed to such U.S. person (with certain adjustments). For tax years beginning on or after January 1, 2018, a "10% U.S. Shareholder" of a non-U.S. corporation includes any U.S. person that owns (or is treated as owning) stock of the non-U.S. corporation possessing 10% or more of the total voting power or total value of such non-U.S. corporation's stock. Any U.S. person that owns (or is treated as owning) 10% or more of the value of AHL should consult with their tax advisor regarding their investment in AHL.

In general, a non-U.S. corporation is a CFC if 10% U.S. Shareholders, in the aggregate, own (or are treated as owning) stock of the non-U.S. corporation possessing more than 50% of the voting power or value of such corporation's stock. However, this threshold is lowered to more than 25% for purposes of taking into account the insurance income of a non-U.S. corporation. Special rules apply for purposes of taking into account any RPII of a non-U.S. corporation, as described below.

In addition, if a U.S. person disposes of shares in a non-U.S. corporation and the U.S. person was a 10% U.S. Shareholder at any time when the corporation was a CFC during the five-year period ending on the date of disposition, any gain from the disposition will generally be treated as a dividend to the extent of the U.S. person's share of the corporation's undistributed earnings and profits that were accumulated during the period or periods that the U.S. person owned the shares while the corporation was a CFC (with certain adjustments). Also, a U.S. person may be required to comply with specified reporting requirements, regardless of the number of shares owned.

Because of the limitations in AHL's bye-laws referred to above, among other factors, we believe it is unlikely that any U.S. person that is treated as owning less than 10% of the total value of AHL would be a 10% U.S. Shareholder of AHL or its non-U.S. subsidiaries. However, because the relevant attribution rules are complex and there is no definitive legal authority on whether the voting provisions included in AHL's organizational documents are effective for purposes of the CFC provisions, there can be no assurance that this will be the case. Further, our ability to obtain information that would permit us to enforce the limitation described above may be limited. We will take reasonable steps to obtain such information, but there can be no assurance that such steps will be adequate or that we will be successful in this regard. Accordingly, we may not be able to fully enforce the limitation described above.

U.S. persons who own our Class A common shares may be subject to U.S. federal income taxation at ordinary income rates on a disproportionate share of our undistributed earnings and profits attributable to RPII.

If any of AHL's non-U.S. subsidiaries is treated as recognizing RPII in a taxable year and is also treated as a CFC for such taxable year, each U.S. person that owns our Class A common shares directly or indirectly through non-U.S. entities as of the last day in such taxable year must generally include in gross income its pro rata share of the RPII, determined as if the RPII were distributed proportionately only to all such U.S. persons, regardless of whether that income is distributed (with certain adjustments). For this purpose, a non-U.S. subsidiary generally will be treated as a CFC if U.S. persons in the aggregate are treated as owning 25% or more of the total voting power or value of the relevant company's stock at any time during the taxable year. We believe that our non-U.S. subsidiaries will be treated as a CFC for this purpose based on the current and expected ownership of our shares.

RPII generally is any income of a non-U.S. corporation attributable to insuring or reinsuring risks of a U.S. person that owns (or is treated as owning) stock of such non-U.S. corporation, or risks of a person that is "related" to such a U.S. person. For this purpose, (1) a person is "related" to another person if such person "controls," or is "controlled" by, such other person, or if both are "controlled" by the same persons, and (2) "control" of a corporation means ownership (or deemed ownership) of stock possessing more than 50% of the total voting power or value of such corporation's stock and "control" of a partnership, trust or estate for U.S. federal income tax purposes means ownership (or deemed ownership) of more than 50% by value of the beneficial interests in such partnership, trust or estate.

Athene and Apollo have considerable overlap in ownership. If it is determined that the same persons "control" both us and Apollo through owning (or being treated as owning) more than 50% of the vote or value of Athene and Apollo, substantially all of the income of AHL's non-U.S. reinsurance subsidiaries might constitute RPII. This would trigger the adverse RPII consequences described above to all U.S. persons that hold our Class A common shares directly or indirectly through non-U.S. entities and would have a material adverse effect on the value of their investment in our Class A common shares.

Existing voting restrictions set forth in AHL's bye-laws are generally intended to prevent a person who owns (or is treated as owning) shares in Apollo from owning (or being treated as owning) any of the voting power of our Class A common shares, thus preventing persons who own (or are treated as owning) both AHL and Apollo from owning (or being treated as owning) more than 50% of the voting power of our stock. However, these restrictions do not prevent members of the Apollo Group from retaining the right to vote on newly acquired Class A common shares, should they choose to do so, nor do they prevent persons who own (or are treated as owning) both AHL and Apollo from owning (or being treated as owning) more than 50% of the value of our stock. AHL's bye-laws also generally provide that no person (nor certain direct or indirect beneficial owners or related persons to such person) who owns our common shares, other than a member of the Apollo Group, may acquire any shares of Apollo or otherwise make any investment that would cause such person, or any other person that is a U.S. person, to own (or be treated as owning) more than 50% of the vote or value of AHL's stock. Any holder of our common shares that violates this provision may be required, at the board's discretion, to sell its common shares or take any other reasonable action that the board deems necessary.

Because of the restrictions described above, among other factors, we believe it is likely that one or more exceptions under the RPII rules will apply such that U.S. persons will not be required to include any RPII in their gross income with respect to AHL's non-U.S. subsidiaries. However, there can be no assurance that this will be the case. Further, our ability to obtain information that would permit us to enforce the restrictions described above may be limited. We will take reasonable steps to obtain such information, but there can be no assurance that such steps will be adequate or that we will be successful in this regard. Accordingly, we may not be able to fully enforce these restrictions.

U.S. persons who dispose of our Class A common shares may be required to treat any gain as ordinary income for U.S. federal income tax purposes and comply with other specified reporting requirements.

If a U.S. person disposes of shares in a non-U.S. corporation that is an insurance company that had RPII and the 25% threshold described above is met at any time when the U.S. person owned any shares in the corporation during the five-year period ending on the date of disposition, any gain from the disposition will generally be treated as a dividend to the extent of the U.S. person's share of the corporation's undistributed earnings and profits that were accumulated during the period that the U.S. person owned the shares (possibly whether or not those earnings and profits are attributable to RPII). In addition, the shareholder will be required to comply with specified reporting requirements, regardless of the amount of shares owned. We believe that these rules should not apply to a disposition of our Class A common shares because AHL is not itself directly engaged in the insurance business. We cannot assure you, however, that the IRS will not successfully assert that these rules apply to a disposition of our Class A common shares.

U.S. tax-exempt organizations that own our Class A common shares may recognize unrelated business taxable income.

A U.S. tax-exempt organization that directly or indirectly owns our Class A common shares generally will recognize unrelated business taxable income and be subject to additional U.S. tax filing obligations to the extent such tax-exempt organization is required to take into account any of our insurance income or RPII pursuant to the CFC and RPII rules described above. U.S. tax-exempt organizations should consult their own tax advisors regarding the risk of recognizing unrelated business taxable income as a result of the ownership of our Class A common shares.

U.S. persons who own our Class A common shares may be subject to adverse tax consequences if AHL is considered a passive foreign investment company for U.S. federal income tax purposes.

If AHL is considered a passive foreign investment company (PFIC) for U.S. federal income tax purposes, a U.S. person who directly or, in certain cases, indirectly owns our Class A common shares could be subject to adverse tax consequences, including a greater tax liability than might otherwise apply, an interest charge on certain taxes that are deemed deferred as a result of AHL's non-U.S. status and additional U.S. tax filing obligations, regardless of the number of shares owned.

We currently do not expect that AHL will be a PFIC for U.S. federal income tax purposes in the current taxable year or the foreseeable future because AHL, through its insurance subsidiaries, intends to qualify for the "active insurance" exception to PFIC treatment. The "active insurance" exception was recently amended by the Tax Act, and we believe that AHL will qualify for the exception as amended. However, there is significant uncertainty regarding how the Tax Act will be interpreted and guidance may not be forthcoming. Therefore, we cannot assure you that AHL will not be treated as a PFIC. If AHL is treated as a PFIC, the adverse tax consequences described above generally would also apply with respect to a U.S. person's indirect ownership interest in any PFICs in which AHL directly or, in certain cases, indirectly, owns an interest.

Changes in U.S. tax law might adversely affect us or our shareholders.

The tax treatment of non-U.S. companies and their U.S. and non-U.S. insurance subsidiaries has been significantly altered by the enactment of the Tax Act. See *Part I—Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations–Industry Trends and Competition–Regulatory Developments*. In particular, the Tax Act:

- Imposes the BEAT (as described above);
- Amends the calculation of tax reserves for U.S. life insurance companies and requires affected companies to include the resulting change in income over an 8-year period beginning in 2018;
- Amends the treatment of "specified policy acquisition expenses" incurred by U.S. life insurance companies under Section 848 of the Internal Revenue Code;
- Restricts the "active insurance" exception to PFIC treatment to "qualifying insurance corporations;"
- Eliminates the prohibition on "downward attribution" from non-U.S. persons to U.S. persons under Section 958(b)(4) of the Internal Revenue Code for purposes of determining constructive stock ownership under the CFC rules (as described above); and
- Amends the definition of "U.S. Shareholder" to include U.S. persons that own (or are treated as owning) 10% or more of the value of a foreign corporation.

There is significant uncertainty regarding how these and other provisions of the Tax Act will be interpreted, and guidance may not be forthcoming. In addition, it is possible that a "technical corrections" bill may be passed during 2018 that could alter or clarify the Tax Act, likely with retroactive effect. Any changes to, clarifications of, or guidance under the Tax Act could add significant expense and have a material adverse effect on our results of operations.

Finally, the tax treatment of non-U.S. companies and their U.S. and non-U.S. insurance subsidiaries may be the subject of further tax legislation. No prediction can be made as to whether any particular proposed legislation will be enacted or, if enacted, what the specific provisions or the effective date of any such legislation would be, or whether it would have any effect on us. As such, we cannot assure you that future legislative, administrative or judicial developments will not result in an increase in the amount of U.S. tax payable by us or by an investor in our Class A common shares or reduce the attractiveness of our products. If any such developments occur, our business, financial condition and results of operation could be materially and adversely affected and such developments could have a material and adverse effect on your investment in our common shares.

Changes in U.S. tax law might adversely affect demand for our products.

Many of the products that we sell and reinsure benefit from one or more forms of tax-favored status under current U.S. federal and state income tax regimes. For example, we sell and reinsure annuity contracts that allow the policyholders to defer the recognition of taxable income earned within the contract. Future changes in U.S. federal or state tax law, could reduce or eliminate the attractiveness of such products, which could affect the sale of our products or increase the expected lapse rate with respect to products that have already been sold.

There is U.S. income tax risk associated with reinsurance between U.S. insurance companies and their Bermuda affiliates.

If a reinsurance agreement is entered into among related parties, the IRS is permitted to reallocate or recharacterize income, deductions or certain other items, and to make any other adjustment, to reflect the proper amount, source or character of the taxable income of each of the parties. If the IRS were to successfully challenge our reinsurance arrangements, our financial condition and results of operations could be adversely affected and the price of our Class A common shares could be adversely affected.

We may not be able to use our deferred tax asset attributes or admit them into statutory capital as a result of the Tax Act.

Under the Tax Act, net operating losses generated in 2018 and thereafter may be carried forward indefinitely but may not be carried back to offset taxable income in prior tax periods. Historically, a portion of our admitted deferred tax asset has reflected our ability to carry net operating losses back to prior tax periods. In the future, the amount of deferred tax asset we are able to admit may be reduced due to the elimination of the carry back period. Because the ability to admit deferred tax assets into statutory capital is dependent in part on our ability to carry losses back to prior tax periods, we may not be able to admit into statutory capital a portion of deferred tax assets that are generated in future tax periods.

We may have fewer investable assets and earn less investment income as a result of the Tax Act.

Certain of the changes made by the Tax Act are expected to increase the amount of our current tax expense. Although the increase in current tax expense from these changes may be largely offset by an increase in the amount of our deferred tax assets, we may have fewer investable assets and thus may earn less investment income.

We may become subject to U.S. withholding tax under certain U.S. tax provisions commonly known as FATCA.

Certain U.S. tax provisions commonly known as the Foreign Account Tax Compliance Act (FATCA) impose a 30% withholding tax on certain payments of U.S. source income and the proceeds from the disposition after December 31, 2018, of property of a type that can produce U.S. source interest or dividends, in each case, to certain "foreign financial institutions" and "non-financial foreign entities." The withholding tax also applies to certain "foreign passthru payments" made by foreign financial institutions after December 31, 2018. The U.S. government has signed an intergovernmental agreement to facilitate the implementation of FATCA with the government of Bermuda (Bermuda IGA). AHL and its foreign subsidiaries intend to comply with the obligations imposed on them under FATCA and the Bermuda IGA, as applicable, to avoid being subject to withholding under FATCA on payments made to them or penalties. However, no assurance can be provided in this regard. We may become subject to withholding tax or penalties if we are unable to comply with FATCA.

If AHL is treated as engaged in a U.S. trade or business in any taxable year, all or a portion of the dividends on our Class A common shares may be treated as U.S. source income and may be subject to withholding and information reporting under FATCA unless a shareholder (and any intermediaries through which the shareholder holds its shares) establishes an exemption from such withholding and information reporting. In addition, any gross proceeds from the sale or other disposition of our Class A common shares after December 31, 2018, might also be subject to withholding and information reporting under FATCA in such circumstances, absent an exemption. As discussed above, we currently intend to limit our U.S. activities so that AHL is not considered to be engaged in a U.S. trade or business, although no assurances can be provided in this regard.

We are subject to the risk that Bermuda tax laws may change and that we may become subject to new Bermuda taxes following the expiration of a current exemption after 2035.

The Bermuda Minister of Finance, under the Exempted Undertakings Tax Protection Act 1966 of Bermuda, as amended, has given us an assurance that if any legislation is enacted in Bermuda that would impose tax computed on profits or income, or computed on any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance tax, then the imposition of any such tax will not be applicable to us or any of our operations, shares, debentures or other obligations until March 31, 2035, except insofar as such tax applies to persons ordinarily resident in Bermuda or to any taxes payable by us in respect of real property owned or leased by us in Bermuda. Given the limited duration of the Bermuda Minister of Finance's assurance, we cannot assure you that we will not be subject to any Bermuda tax after March 31, 2035.

The impact of the OECD's recommendations on base erosion and profit shifting is uncertain and could impose adverse tax consequences on us.

In 2015, the OECD published final recommendations on base erosion and profit shifting (BEPS). These BEPS recommendations propose the development of rules directed at counteracting the effects of tax havens and preferential tax regimes in countries around the world. Beginning with 2017, some countries in which we do business, including Bermuda and the U.S., require certain multinational enterprises, including ours, to report detailed information regarding allocation of revenue, profit, and other information, on a country-by-country basis, which could increase scrutiny by foreign tax authorities.

The BEPS recommendations also include revisions to the definition of a "permanent establishment" and the rules for attributing profit to a permanent establishment. Other recommended actions relate to the goal of ensuring that transfer pricing outcomes are in line with value creation, noting that the current rules may facilitate the transfer of risks or capital away from countries where the economic activity takes place. We expect many countries to change their tax laws in response to this project, and several countries (including the U.S.) have already changed or proposed changes to their tax laws. Changes to tax laws could increase their complexity and the burden and costs of compliance. Additionally, such changes could also result in significant modifications to the existing transfer pricing rules and could potentially have an impact on our taxable profits in various jurisdictions.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Securities

Purchases of common stock made by or on behalf of us or our affiliates during the three months ended September 30, 2018 are set forth below:

Period	(a) Total number of shares purchased[1]	(b) Average price paid per share[1]	(c) Total number of shares purchased as part of publicly announced programs[2]	(d) Maximum number (or approximate dollar value) of shares that may yet be purchased under the plans or programs[2]
July 1 – July 31, 2018	259	$ 44.19	—	$ —
August 1 – August 31, 2018	287	$ 49.98	—	$ —
September 1 – September 30, 2018	—	$ —	—	$ —

[1] *Purchases relate to shares withheld (under the terms of employee stock compensation plans) to offset tax withholding obligations that occur upon the delivery of outstanding shares underlying restricted stock awards or units or upon the exercise of stock options.*

[2] *As of September 30, 2018, our Board of Directors had not authorized any purchases of common stock in connection with a publicly announced plan or program.*

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

EXHIBIT INDEX

Exhibit No.	Description
12.1	Statement of Ratio of Earnings to Fixed Charges.
31.1	Principal Executive Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Principal Financial Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Principal Executive Officer Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Principal Financial Officer Certification 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.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ATHENE HOLDING LTD.

Date: November 1, 2018

/s/ Martin P. Klein

Martin P. Klein
Executive Vice President and Chief Financial Officer
(principal financial officer and duly authorized signatory)

Exhibit 12.1

Statement of Ratio of Earnings to Fixed Charges

(In millions, except ratio)	Nine months ended September 30, 2018	Years ended December 31, 2017	2016	2015	2014	2013
Income before income taxes	$ 1,363	$ 1,535	$ 716	$ 590	$ 524	$ 986
Less: Undistributed income (loss) from equity investees	128	110	97	43	25	20
Less: Noncontrolling interest	—	—	—	16	15	81
Add: Fixed charges, excluding deferred sales inducements additions and deferred financing costs	1,196	2,883	1,364	785	1,931	1,131
Add: Amortization of deferred sales inducements	66	63	39	21	4	16
Add: Amortization of deferred financing costs	1	—	2	3	3	—
Earnings available for fixed charges	$ 2,498	$ 4,371	$ 2,024	$ 1,340	$ 2,422	$ 2,032
Interest expensed and capitalized	$ 1,392	$ 3,043	$ 1,563	$ 920	$ 2,044	$ 1,167
Deferred financing costs	10	—	—	—	—	8
Estimated interest component of rent expense	1	1	1	1	—	1
Fixed charges	$ 1,403	$ 3,044	$ 1,564	$ 921	$ 2,044	$ 1,176
Ratio of earnings available for fixed charges to fixed charges	1.78	1.44	1.29	1.45	1.18	1.73

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY OF 2002

I, James R. Belardi, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Athene Holding Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 1, 2018

/s/ James R. Belardi

James R. Belardi

Chairman, Chief Executive Officer and Chief Investment Officer

(principal executive officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY OF 2002

I, Martin P. Klein, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Athene Holding Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 1, 2018

/s/ Martin P. Klein

Martin P. Klein

Executive Vice President and Chief Financial Officer

(principal financial officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY OF 2002

I, James R. Belardi, certify that Athene Holding Ltd.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Athene Holding Ltd.

Date: November 1, 2018

/s/ James R. Belardi

James R. Belardi

Chairman, Chief Executive Officer and Chief Investment Officer

(principal executive officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY OF 2002

I, Martin P. Klein, certify that Athene Holding Ltd.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Athene Holding Ltd.

Date: November 1, 2018	/s/ Martin P. Klein
	Martin P. Klein
	Executive Vice President and Chief Financial Officer
	(principal financial officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.